

Manolis Tsiknakis, Ph.D.

*Curriculum Vitae*

*March 2021*

# Manolis Tsiknakis, Ph.D.

**Born:** March 10, 1959

**Citizenship:** Greek

**Marital Status:** Married, 2 children

## Hellenic Mediterranean University Address

Department of Electrical and Computer Engineering  
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## FORTH Address

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## Education

- |           |                                                                                                                                                                                                                               |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1985-1989 | Ph.D. in Signal Processing and Intelligent Systems, University of Bradford, UK.<br><b>Title of Thesis:</b> <i>An Intelligent Electromagnetic Flowmeter Based on Novel Excitation Waveforms and Advanced Signal Processing</i> |
| 1983-1984 | Master of Science (M.Sc.) in Microprocessor Engineering, School of Electric and Electronic Engineering, University of Bradford, UK.<br><b>Title of Master Thesis:</b> <i>A Disk Drive Controller for the VME bus</i>          |
| 1979-1983 | Batchelor of Engineering (B.Eng.) in Electric and Electronic Engineering, University of Bradford, UK.                                                                                                                         |

## Research Interests

My current research interests include biomedical informatics and engineering; Semantic health data integration; ubiquitous sensor-based human behaviour modelling, activity and context recognition; affective computing and smart eHealth and mHealth service platforms.

Prof Tsiknakis continues to show a strong interest on issues related to managing technological change and socio-economic aspects of e-business in general and eHealth/mHealth technologies and services in specific.

## Academic Positions

- |                       |                                                                                                                                                                        |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| May 2019 – present    | Professor of Biomedical Informatics and eHealth, Department of Electrical and Computer Engineering, School of Engineering, Hellenic Mediterranean University           |
| April 2016 – May 2019 | Professor of Biomedical Informatics and eHealth, Department of Informatics Engineering, School of Engineering, Technological Educational Institute of Crete.           |
| Feb 2012 – Mar. 2016  | Associate Professor of Biomedical Informatics and eHealth, Department of Informatics Engineering, School of Engineering, Technological Educational Institute of Crete. |

## Research Appointments

- |                   |                                                                                                                                                                                                                                                                                                 |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Feb 12 - present  | Visiting Research Professor, Computational BioMedicine Laboratory, Institute of Computer Science (ICS), Foundation for Research and Technology-Hellas (FORTH), Heraklion, Crete, Greece.                                                                                                        |
| Aug. 02 - Jan 12  | Principal Researcher - Institute of Computer Science, Foundation for Research and Technology-Hellas (FORTH), Heraklion, Crete, Greece.                                                                                                                                                          |
| Aug. 99 - July 02 | Associate Researcher - Institute of Computer Science, Foundation for Research and Technology-Hellas (FORTH), Heraklion, Crete, Greece.                                                                                                                                                          |
| Feb.92 - July 99  | Associated Scientist – Institute of Computer Science, Foundation for Research and Technology-Hellas (FORTH), Heraklion, Crete, Greece.                                                                                                                                                          |
| Feb.92 - Jul. 94  | Affiliated Research Scientist, Institute of Computer Science, Foundation for Research and Technology-Hellas, Heraklion, Crete, Greece.                                                                                                                                                          |
| 1987 - 1990       | Research Fellow with academic responsibilities, School of Control Engineering, University of Bradford, Bradford, UK. Taught the subjects of <i>Digital Signal Processing, Measurement and Control, Computer Systems for Real Time Control</i> at the MSc course of Control Systems Engineering. |
| 1985 - 1987       | Research Assistant, School of Control Engineering, University of Bradford, Bradford, UK, funded by a grant from the British National Research Council.                                                                                                                                          |

## Teaching Positions and Experience

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|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| May 2019 – present | Professor of Biomedical Informatics and eHealth Services, Hellenic Mediterranean University, Crete, Greece. Teaching responsibilities remain the same as previously at TEI Crete. |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

- Feb 2012 – May 2019 Professor of Biomedical Informatics and eHealth Services, Technological Educational Institute of Crete, Greece. Teaching the undergraduate courses in *Biomedical Informatics, eHealth and mHealth services*, Bioinformatics and Modelling of Physiological Systems, Management of ICT projects as well as Innovation, Entrepreneurship and the Internet. Prof Tsiknakis is also teaching the courses *Research Methods and Project Management* and *Advanced topics in Biomedical Informatics* at the postgraduate course on *Informatics Engineering* of TEI Crete.
- Feb 2003 – July 2007 Visiting Associate Professor, Department of Computer Science, University of Crete. Taught the courses on *Medical Informatics, Multimedia Clinical Information Systems and eHealth* at the postgraduate course of Computer Science.
- Feb 1997- July 2000 Visiting Associate Professor, Technological Institute of Heraklion, STEF. Taught the courses on *Programming* and *Medical Information Systems*.
- Oct 1987- Jun 1990 School of Control Engineering, University of Bradford, Bradford, UK. Taught the subjects of *Digital Signal Processing, Measurement and Control and Computer Systems for Real Time Control* at the MSc course of Control Systems Engineering.

## Scientific Positions

- 2020 Dr Tsiknakis is a member of the Organising Committee of the IEEE Biomedical and Health Informatics (BHI) and Body Sensor Networks (BSN) 2020 Conferences.
- 2018 – present Dr Tsiknakis is a member of the Editorial Board of the European Journal for Biomedical Informatics (<https://www.ejbi.org/editorial-board.html>)
- 2016 – present Dr Tsiknakis is an Associate Editor of the *IEEE Journal of Biomedical and Health Informatics* (Impact Factor 2019 : 4.217)
- 2016 – present Dr Tsiknakis is a member of the Editorial Board of the open access *International Journal of Telemedicine and Applications* (<https://www.hindawi.com/journals/ijta/>)
- Nov. 2012 Chair of the evaluation panel for the project OpenPHACTS (An open, integrated and sustainable chemistry, biology and pharmacology knowledge resource for drug discovery), funded through the Innovative Medicine Initiative programme of the EU.
- 2010 Scientific Program co-chair, 10th IEEE International Conference on Information Technology and Applications in Biomedicine (ITAB 2010).
- 2010 Member of the Technical Program Committee for International ICST Conference on Wireless Mobile Communication and Healthcare (MobiHealth 2010).
- 2009 Program Committee member of the 9th *International Conference on Information Technology and Applications in Biomedicine, (ITAB 2009)*, Cyprus, 5-7 November 2009, (<http://www.cs.ucy.ac.cy/itab2009/committees.html>).
- 2009 Program Committee member of track Special Session S11: Intelligent Systems Design and Applications in the Health Domain of the *International Conference on Intelligent Systems Design and Applications 2009 (ISDA 09)*, Piza, Italy, 30 November – 2 December, (<http://cig.iet.unipi.it/isda09/>).
- 2009 Program Committee member of the International conference *IADIS e-Health 2009 (EH 2009)*, Algarve, Portugal, 21-23 June 2009, (<http://www.ehealth-conf.org/topics.asp>).

- 2009 Member of the Scientific Committee of the International Educational Meeting Biomed Grid School 2009, Como, Italy 11-17 May 2009, (<http://www.biomedgrid.it>).
- 2008- Member of the Editorial Board of the scientific journal (open access) *The Open Medical Informatics Journal* (<http://www.bentham.org/open/tominfo/EBM.htm>)
- 2008-2009 Member of the Editorial Advisory Board of the Book *Virtual Communities of Practice and Social Interactive Technologies: Lifecycle and Workflow Analysis*, D. Akoumianakis (Editor).
- 2008 Member of the International Review Board of the IADIS Multi Conference on Computer Science and Information Systems 2007 - "e-LEARNING - eL2008".
- 2007 Expert acting as the country correspondent in the "Exchange of Good Practices in eHealth" (Good eHealth - [www.good-ehealth.org](http://www.good-ehealth.org)) carried out by Deloitte (Belgium) and Empirica (Germany) for the European Commission, DG INFSO and Media.
- 2007 Member of the Program Committee of the *European Conference on eHealth (ECEH07)*, Oldenburg, Germany, October 11 - 12, 2007.
- 2007 Member of the International Review Board of the *International Conference on Health Information Technology (ICHIT07)*, Berlin, 12-15 June 2007.
- 2007 Member of the International Review Board of the IADIS Multi Conference on Computer Science and Information Systems 2007 - "e-LEARNING - eL2007".
- 2006 Member of the Program Committee of the *European Conference on eHealth (ECEH06)*, Fribourg, Switzerland on October 12-13 2006.
- 2006 Member of the Technical Program Committee of the *IEEE Information Technologies and Applications in Biomedicine 2006 International Conference*, Ioannina, Greece, 26-28 Oct. 2006.
- 2006 Member of the Advisory Board of the *eHealth 2006 High Level Conference*, Malaga, 10-12 May 2006.
- 2003 - 2006 Member of the Programme Committee, HealthGrid Conference, 2003, 2004, 2005, 2006
- 2005 Member of the Scientific Committee of the *18th IEEE Symposium on Computer-Based Medical Systems (IEEE CBMS 2005)*, June 23-24, 2005, Dublin, Ireland.
- 2002 Member of the Programme Committee of the Tenth International Symposium on *Health Information Management Research (iSHIMR2002)*.

## Advisory activities

- 2010 - 2013 Chair of the Scientific Advisory Committee of the project EHR4CR, funded by the Innovative Medicine Initiative (IMI) of the EU.
- 2011 – 2012 Member of the Expert's Advisory Committee to the Greek Ministry of eGovernment. Area of expertise eHealth.
- 2010 - 2012 Member of the Scientific Advisory Board of the EC FP7 POKEMON Large Collaborative project entitled "*Point of Care Monitoring and Diagnostics for Autoimmune Diseases*".
- 2006 - 2010 Member of the Scientific Advisory Board of the EC FP6 *SmartHEALTH* Integrated Project entitled "*Smart Integrated Biodiagnostic Systems for Healthcare*".

## Reviewer and Evaluator Assignments

Dr Tsiknakis has been and continues to be a regular reviewer for a number of scientific journals, such as

- IEEE Journal on Affective Computing
- IEEE Journal of Biomedical and Health Informatics (previous known as Transactions on Information Technology in Biomedicine)
- Sensors, Elsevier
- International Journal of Biomedical Informatics
- International Journal of Medical Informatics
- IEEE Communications Magazine
- IEEE Transactions on Biomedical Engineering
- BMC Medical Informatics and Decision Making
- Computer Methods and Programs in Biomedicine
- Open Medical Informatics Journal
- The International Journal of Technological Innovation, Entrepreneurship and Technology Management

Dr Tsiknakis is also acting as a regular reviewer for a number of international conferences, such as:

- World Congress of Medical Informatics (Medinfo)
- Medical Informatics in Europe (MIE) conference
- IEEE Engineering in Medicine and Biology (IEEE EMBC) International Conference
- IEEE Conference on Biomedical and Health Informatics
- European Conference on eHealth (ECEH)
- IADIS International Conference on eHealth (IADIS eHealth)

Dr Tsiknakis has also acted repeatedly as an evaluator for research proposals for the General Secretariat for Research and Technology of Greece, the Irish Health Research Board (2005-2009).

## Administrative Positions

2019 – present	Head of the Laboratory of Applied and interactive computing, Dep. of Electrical and Computer Engineering, Hellenic Mediterranean University, Crete, Greece.
May 2013 – Dec. 2017	Vice Rector for Research and Infrastructure Development, Technological Educational Institute of Crete.
Jan. – May 2013	Head of Department, Applied Informatics and Multimedia, Technological Educational Institute of Crete.
May 2012 – 2013	Member of the Managing Committee of the Postgraduate Course in Applied Informatics and Multimedia, Department of Applied Informatics and Multimedia, TEI Crete.
Feb. 2012 – 2018	Head of the Biomedical Informatics and eHealth Laboratory, Department of Applied Informatics and Multimedia, Technological Educational Institute of Crete.
2005 – 2010	Head of the Center for eHealth technologies (previously known as Center for Medical Informatics and Health Telematics Applications), Institute of Computer Science, Foundation for Research and Technology-Hellas.
1995 - 2004	Coordinator of the Center for Medical Informatics and Health Telematics Applications (a multidisciplinary group of approximately 35 researchers,

technical and support staff), Institute of Computer Science, FORTH. My responsibilities involved, among others, establishing, participating in and managing joint research projects between industry and academia, as well as the day-to-day management of all activities of the Center.

## Organisation of Conferences and Scientific Workshops

- 2019 Dr Tsiknakis was the General Chair of the IEEE Bioinformatics and Bioengineering 2019 Conference, Athens 28-30 October 2019 (<https://bibe2019.ics.forth.gr/>)
- 2017 Dr Tsiknakis was the organiser of a Special Session on “Cancer Informatics” during the BHI-2017 International Conference on Biomedical and Health Informatics, Las Vegas, US.
- 2013 Organiser of a Special Session on “The Digital Patient concept: Vision and Early Demonstrations”, 13th IEEE International Conference on Bioinformatics and BioEngineering, November 2013, Chania, Crete, Greece.
- 2013 Co-organiser of a Special Session on ““Computational solutions to large-scale data management and analysis in translational and personalized medicine” at the 35th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC’13), Osaka, Japan, July 2013.
- 2012 Dr Tsiknakis was the organiser of the Special Session on “*Computational solutions to large-scale data management and analysis in translational, personalized and predictive medicine*”, 12th IEEE International Conference on Bioinformatics and BioEngineering (BIBE 2012), Cyprus, Nov 2012.
- 2010 Dr Tsiknakis was the organiser of the Special Session on “*Integrated ICT and post-genomic approaches in neurological disorders*”, organised as part of the IEEE International Conference on Information Technology and Applications in Biomedicine (ITAB 2010), Corfu, Greece.
- 2008 Dr Tsiknakis is the co-chair of the scientific session entitled “*Knowledge Discovery and Decision Support Systems in Health Information Systems*”, organised as part of the International Conference on Health Informatics (HEALTHINF 2008), 28-31 January 2008, Madeira, Portugal.
- 2006 Dr Tsiknakis was the Programme Chair of the Scientific Workshop on “*ICT technologies for Cancer research and management in the post-genomic era*”, organised as a pre-conference workshop during the IEEE Information Technology in Biomedicine (ITAB) 06 Conference, Ioannina, Greece, Oct 2006.
- 2006 Dr Tsiknakis was the organiser and chair of the Scientific workshop on “*ICT challenges in advancing clinico-genomic research: multilevel data integration and knowledge discovery issues*”, organised by the ERCIM Working Group on Biomedical Informatics and the ACGT Integrated Project, Budapest, May 2006.
- 2003 Dr Tsiknakis was the Chair of the Organising Committee of the 1<sup>st</sup> Regional Conference “*Innovation and Health in the 21<sup>st</sup> Century*”, Heraklion, Crete, Greece, 12-13 December 2003.
- 2000 Dr Tsiknakis was the Chair of the international Workshop entitled “*Next Generation Regional Health and Social Care Networks: challenges and opportunities*”, Barcelona, 30 Nov – 1 Dec 2000.

## Other National and International Activities

November 2019	Evaluator of the second stage proposal submitted in response to the call for proposals of the Innovative Medicines Initiative 2 Joint Undertaking (IMI2) (H2020-JTI-IMI2-2017-17- stage two).
September 2019	Evaluator of the proposals submitted in response to the call for proposals of the Innovative Medicines Initiative 2 Joint Undertaking (IMI2) (H2020-JTI-IMI2-2017-18-stage one).
March 2018	Evaluator for proposals submitted in the context of the annual Chair of the Research Council KU Leuven
March 2018	Evaluator of the proposals submitted in response to the call for proposals of the Innovative Medicines Initiative 2 Joint Undertaking (IMI2) (H2020-JTI-IMI2-2017-13-two-stage).
Dec. 2017	Evaluator of the proposals submitted in response to the call for proposals of the Innovative Medicines Initiative 2 Joint Undertaking (IMI2) (H2020-JTI-IMI2-2016-10-two-stage).
Sept. 2017	Reviewer of research proposals submitted in the call for “User-centred health technology and digital health services review panel” of the Academy of Finland.
2015	Reviewer of the eTRIKS ( <a href="https://www.etriks.org/">https://www.etriks.org/</a> ) project submitted within the Knowledge management pillar of the Innovative Medicine Initiative (IMI) programme of the EU.
2014	Reviewer of the project proposals submitted within the Knowledge management pillar of the Innovative Medicine Initiative (IMI) programme of the EU.
2013	Evaluator of the project proposals submitted within the Knowledge management pillar of the Innovative Medicine Initiative (IMI) programme of the EU.
2012	Member of the Evaluation Committee for the 2nd National Competition on “Applied research and Innovation”, organised by the Hellenic Federation of Enterprises.
2012-13	External evaluation expert for the Ministry of education and science of the Russian Federation within the framework of the initiative "On measures designed to attract the world's leading scientists to Russian institutions of higher learning".
2012	Evaluator of competitive R&D proposals submitted in the context of the IMI (Innovative Medicine Initiative) programme of the EU.
2012	External expert for evaluating competitive project proposals for the Luxembourg National Research Fund (FNR) within the framework of its multi-annual research programme CORE 2012.
2011	External international expert for evaluation of competitive project proposals for the French National Research Agency (ANR) in the context of its initiative “Investissements d’Avenir” or “Investments for the future” (subdomain Bioinformatics).
2011	Evaluator of the project proposals submitted within the Knowledge management pillar of the Innovative Medicine Initiative (IMI) programme of the EU.
2011 – 2012	Member of the “National Task Force and Coordination Committee (ΟΔΙΣΣΕΕ)” in the domain of eHealth and Social Security of the Ministry of Electronic Governance.

2011	Evaluator of R&D proposals for the Luxembourg National Research Fund (FNR) within the framework of its multi-annual research programme CORE 2011.
2011 -	FORTH's representative and member of the "Innovation in Health" Committee of the Region of Crete.
2010	Evaluator of competitive R&D proposals submitted in the context of the IMI (Innovative Medicine Initiative) programme of the EU.
2010 - 2012	Member of the Peer-Review Team for the FP7 funded project FP7-ICT-216088 POCEMON "Point-Of_Care MONitoring and Diagnostics for Autoimmune Diseases".
2004 – 2008	Chair of the Biomedical Informatics Working Group of the European Research Consortium on Informatics and Mathematics (ERCIM, www.ercim.org).
2003- Present	Member of the Executive Committee of the HL7 - Hellas, whose aim is to act as a catalyst for the promotion and use of the HL7 standard in the Medical Informatics domain in Greece.
2003- Present	Member of the Board of the European Health Telematics Association (EHTEL), a non-for-profit European organization with the purpose of promoting eHealth service uptake in Europe.
2003- Present	Member of the Association of Medical and Biological Engineering and Science (EAMBES), an academic non-for-profit association for promoting biomedical research and science in Europe.
2003- Present	Member of the European Institute for Health Records (EUROREC), a non-for-profit European organization with the purpose of promoting the widespread use of Electronic Health Records in Europe.
2002 – 2003	Chair of the Health Information Technology Working Group of the European Research Consortium on Informatics and Mathematics (ERCIM, www.ercim.org).
2002	External Expert to the National Information Society Coordination Committee with the purpose of evaluating the ICT Strategy of the Greek Ministry of Health And Social Care.
2000- 2005	National Representative for the EUMEDIS (Euro-Mediterranean Information Society) Programme of the European Community.
2001-2002	Member of the Task Force for the development of an Information Society Strategy for the Region of Crete.
1997-1998	Evaluator of competitive R&D proposals for the General Secretariat for research and Technology, Ministry of Development, Greece.
1986-1989	Consultant to several industrial companies in the instrumentation sector in the UK.

## Professional Societies

- Member of the IEEE (Institute of Electrical and Electronics Engineers) since 1993
- Member of the IEEE – EMBS (Engineering in Medicine and Biology Society) since 1995.
- Member of the Institute of Measurement and Instrumentation since 1986.

## Awards and Honors

1. The paper "A kouroubali, D. Katehakis, A Berler, M. Tsiknakis, *Electronic Health Record Systems: Luxury or Need, 14<sup>th</sup> National Conference on Management of Health Services, Athens, 12-13 October 2012*", received the best paper award.

2. Project EMISPHER (Contract No. EUMEDIS 110) received the **best project award**, during the ATVN-EU-GP Conference, 1-3 December 2005 in Poland. The EMISPHER Project was awarded the first prize in the “e-Health” category of contest of “Good Practice Projects”; (<http://www.atvn-eu-gp.pl/contest/index.htm>)
3. The paper “A. Kouroubali, D. Vourvahakis, M. Tsiknakis: Innovative Practices in the Emergency Medical Services in Crete,” received the best paper award at the iSHMIR 05 Conference, Thessaloniki, Greece, Sept 2005. ([www.seerc.info/ishmir2005/index.html](http://www.seerc.info/ishmir2005/index.html)).
4. The research study carried out by Dr Tsiknakis and members of the eHealth laboratory of FORTH-ICS in collaboration with CNR, Italy entitled : "*Predicting the End of an Atrial Fibrillation Episode*" **received three awards** in the international competition (<http://www.physionet.org/challenge/2004/>) that took place on 19-22 September 2004 within the scope of the International Annual Congress on Computers in Cardiology, Chicago, USA.
5. Dr Tsiknakis received the **2003 FORTH's award** for best applied research. This is an annual award given by FORTH to innovative research and technological achievements by its researchers in the domains of basic and applied research.
6. The Regional Health Information Network of Crete "*HYGEIAnet*" was selected a finalist (among more than 180 contenders) at the ministerial conference and exhibition eHealth 2003, that took place in Brussels on May 2003 and received the **second prize** in the Regional Health Information networks category.
7. The Poster "*ECG in Your Hands: A Multi-Vendor ECG Viewer for Personal Digital Assistants*" by F. Chiarugi, M. Spanakis, P.J. Lees, C. Chronaki, M. Tsiknakis and SC Orphanoudakis received the **best poster award** at the Computers in Cardiology 2003 Conference that took place in Chalkidiki, Greece, 21-24 September 2003.

## Research Grants (Hellenic Mediterranean University)

- ➔ "*CardioCare – An interdisciplinary approach for the management of the elderly multimorbid patient with breast cancer therapy induced cardiac toxicity*". Collaborative R&D project funded under the H2020 programme of the European Commission, SC1-BHC-24-2020: Healthcare interventions for the management of the elderly multimorbid patient, (01/07/2021-31/06/2025), HMU Budget: 307.250 Euro. Prof Tsiknakis is HMU's principal investigator.
- ➔ "*Smart Insole - Ένας καινοτόμος φορητός αισθητήρας για συνεχή ανάλυση και αξιολόγηση της ανθρώπινης βάδισης (A novel wearable sensor for continues human gait analysis and evaluation)*". R&D project funded under the call “Ερευνώ – Δημιουργώ – Καινοτομώ” of the General Secretariat for Research and Technology Hellas (07/09/2018-6/09/2021). HMU's Budget: 213.654 Euro. Prof Tsiknakis is the project's scientific coordinator and HMU's principal investigator.
- ➔ "*HarmonicSS - HARMONization and integrative analysis of regional, national and international Cohorts on primary Sjögren's Syndrome (pSS) towards improved stratification, treatment and health policy making*". R&D project funded under the H2020 – Health, demographic change and well-being programme of the European Commission, TEI Crete's (currently HMU) Budget: 215.000 Euro. Prof Tsiknakis is HMU's principal investigator.
- ➔ "*CHIC - Computational Horizons in Cancer (CHIC): Developing Meta- and Hyper-Multiscale Models and Repositories for In Silico Oncology*". Large Collaborative Research Project funded by the FP7-ICT programme of the European Commission (2013-2017). HMU's Budget: 128.000 Euro. Prof Tsiknakis is HMU's principal investigator.
- ➔ "*MyHealthAvatar - Demonstration of a 4D Digital Avatar Representation for Access to Long-Term Health Status Information*". Small Collaborative Research Project (STREP) funded by the FP7-ICT programme of the European Commission (2013-2016). HMU's Budget: 106.000 Euro. Prof Tsiknakis is HMU's principal investigator.

- ➔ “*CONTRACT - Consent in a Trial and Care environment*”. Coordination and support action funded by the FP7-Health programme of the European Commission (2010-2012). HMU 's Budget: 98.000 Euro. Prof Tsiknakis is HMU's principal investigator.
- ➔ “*Eurocancercomms - Establishing an efficient network for cancer communication in Europe*”. Coordination and support action, funded by the FP7-SiS programme of the European Commission (2011-2012). HMU's Budget: 154.000 Euro. Prof Tsiknakis is HMU's co-principal investigator together with Prof Akoumianakis.

## Research Grants (FORTH)

- ➔ “*ODIN - Leveraging AI based technology to transform the future of health care delivery in Leading Hospitals in Europe*”. Collaborative Research project funded by the H2020 programme of the European Commission, DT-ICT-12-2020 - AI for the smart hospital of the future, (01/03/2021-28/2/2025). Dr Tsiknakis is FORTH's co-principal investigator.
- ➔ “*LETHE (λήθη) – A personalized prediction and intervention model for early detection and reduction of risk factors causing dementia, based on AI and distributed Machine Learning*”. Collaborative Research project funded by the H2020 programme of the European Commission, SC1-DTH-02-2020: Personalised early risk prediction, prevention and intervention based on Artificial Intelligence and Big Data technologies, (01/01/2021-31/12/2024). Dr Tsiknakis is FORTH's co-principal investigator.
- ➔ “*ProCAncer-I - An AI Platform integrating imaging data and models, supporting precision care through prostate cancer's continuum*”. Collaborative Research project funded by the H2020 programme of the European Commission, H2020- DT-TDS-05-2020 – AI for Health Imaging (01/10/2020-30/9/2024). Dr Tsiknakis is the project's **Coordinator**.
- ➔ “*HealthSonar: A system for monitoring sleep and healthy living with low energy radio technology*”. R&D project funded under the call “Research-Create-Innovate” of the General Secretariat for Research and Technology Hellas (07/07/2020-6/12/2022). Prof Tsiknakis is the project's **Scientific Coordinator** and FORTH's principal investigator.
- ➔ “*Loock-Me - An intelligent, deep learning enhanced multimedia platform for automated indexing, storage, searching and retrieval of locations to filming (shoot)*”. R&D project funded under the call “Research-Create-Innovate” of the General Secretariat for Research and Technology Hellas (07/07/2020-6/12/2022). Prof Tsiknakis is the project's scientific coordinator and FORTH's principal investigator.
- ➔ “*SeeFar - Smart glasses for multifacEted visual loss mitigation and chronic disEase prevention indicator for healthier, saFer, and more productive workplAce foR ageing population*”. Collaborative Research project funded by the H2020 programme of the European Commission, H2020-SC1-DTH-2018-1 - SC1-DTH-03-2018 (01/01/2019-31/12/2021). Dr Tsiknakis is FORTH's co-principal investigator (together with Prof. D.I. Fotiadis).
- ➔ “*iManageCancer - Empowering patients and strengthening self-management in cancer diseases*”. Collaborative Research project funded by the H2020 programme of the European Commission, PHC-26-2014-643529, (01/02/2015-31/7/2018). Dr Tsiknakis is FORTH's co-principal investigator (together with Prof. K. Marias).
- ➔ “*Semeoticons - SEMEiotic Oriented Technology for Individual's CardiOmetabolic risk self-assessmeNt and Self-monitoring*”. Small collaborative Research Project funded by the FP7-ICT programme of the European Commission, FP7-ICT-2013-10-611516, (2012-2016). Dr Tsiknakis is a principal investigator.
- ➔ “*PredictES - An Integrated wearable platform predicting Epileptic Seizures and novel neurofeedback ap-proaches in support of personalized patient management*”. National Strategic Reference Framework (NSRF) 2007-2013, Cooperation 2011 - 11SYN-10-998, (9/2013 – 10/2015). Dr Tsiknakis is the project's **Scientific Coordinator**.

- ➔ “*EURECA*”, Large Collaborative Research Project funded by the FP7-ICT programme of the European Commission (2/2012-7/2015). Dr Tsiknakis is a member of the Project’s Management Board and FORTH’s principal investigator.
- ➔ “*p-medicine*”, Large Collaborative Research Project funded by the FP7-ICT programme of the European Commission (2/2011-7/2015). Dr Tsiknakis is a member of the Project’s Management Board, a member of the Technical Coordination Committee and FORTH’s principal investigator.
- ➔ “*ENNCA*”, Network of Excellence funded by the FP7-Health programme of the European Commission (2011-2015). Dr Tsiknakis is a member of the Project’s Management Board and FORTH’s principal investigator.
- ➔ “*INTEGRATE*”, Small Collaborative Research Project funded by the FP7-ICT programme of the European Commission (2011-2014). Dr Tsiknakis is a member of the Project’s Management Board and FORTH’s principal investigator.
- ➔ “*Gen2Phen*”, Large Collaborative Research Project funded by the FP7-Health programme of the European Commission (2008-2012). Dr Tsiknakis is a principal investigator.
- ➔ “*I4Crete*” - Regional Innovation Pole of Crete (2006-2008) – Dr Tsiknakis is the **Scientific Coordinator** of the action related to the specification of a “Regional Technology Platform on eHealth” and the action related to the design of the conceptual model for the post-genomic electronic health record.
- ➔ “*ACGT*”, Integrated Project, funded by the Information Society Technologies Programme of the European Commission (2006-2010). Dr Tsiknakis is the **Scientific Coordinator** of the Project.
- ➔ “*LOCCANDIA*”, Specific Targeted Research Project (STREP), funded by the IST programme of the European Commission. Dr Tsiknakis is a member of the Project’s Management Board and FORTH’s principal investigator.
- ➔ “*HARTFAID*”, Specific Targeted Research Project (STREP), Funded by the Information Society Technologies Programme of the European Commission (2004-2006). Dr Tsiknakis is a member of the Project’s Management Board and FORTH’s principal investigator.
- ➔ “*SYMBIOMATICS*”, Specific Support Action (SSA) in the domain of Biomedical Informatics, Funded by the Information Society Technologies Programme of the European Commission (2004-2006). Dr Tsiknakis is a member of the Project’s Management Board and FORTH’s principal investigator.
- ➔ “*HEALTHWARE*”, Integrated Project, Funded by the Space and Satellite Programme of the European Commission (2004-2006). Dr Tsiknakis is a member of the Project’s Management Board and FORTH’s principal investigator.
- ➔ “*RURAL WINGS*”, Integrated Project, Funded by the Space and Satellite Programme of the European Commission (2004-2006). Dr Tsiknakis is a member of the Project’s Management Board and FORTH’s principal investigator.
- ➔ “*eu-DOMAIN*”, Specific Targeted Research Project (STREP), Funded by the Information Society Technologies Programme of the European Commission (2004-2006). Dr Tsiknakis is a member of the Project’s Management Board and FORTH’s principal investigator.
- ➔ “*TWISTER*”, Integrated Project, Funded by the Space and Satellite Programme of the European Commission (2004-2006). Dr Tsiknakis is a member of the Project’s Management Board and FORTH’s principal investigator.
- ➔ “*INFOBIOMED*”, Network of Excellence, Funded by the Information Society Technologies Programme of the European Commission (2004-2006). Dr Tsiknakis is a member of the Project’s Management Board and FORTH’s principal investigator.
- ➔ “*TWISTER*”, Integrated Project, Funded by the Satellite and Space Technologies Programme of the European Commission (2004-2006). Dr Tsiknakis is a member of the Project’s Management Board and FORTH’s principal investigator.

- ➔ “ADOL”, Funded by the General Secretariat for Research and Technology, Ministry of Development (Programme ΕΠΑΝ), (2002 – 2004). Dr Tsiknakis is FORTH’s principal investigator.
- ➔ “EMISPHER”, Funded by the Ten-Telecom Programme of the European Commission (2001-2004). Dr Tsiknakis is a member of the Project’s Management Board and FORTH’s principal investigator.
- ➔ “CORAS”, Funded by the Information Society Technologies (IST) Programme of the European Commission (2001-2003). Dr Tsiknakis is a member of the Project’s Management Board and FORTH’s principal investigator.
- ➔ “PICNIC”, Funded by the Information Society Technologies (IST) Programme of the European Commission (2000-2003). Dr Tsiknakis is a member of the Project’s Management Board and the Technical Management Committee and FORTH’s principal investigator.
- ➔ “JUST”, Project Leader and Scientific Coordinator, Funded by the Information Society Technologies (IST) Programme of the European Commission (2000-2002). Dr Tsiknakis is the Project **Scientific Coordinator**.
- ➔ “BreastCancer”, Funded by the General Secretariat for Research and Technology, Ministry of Development (Programme ΠΕΝΕΔ), (1999 – 2001). Dr Tsiknakis is FORTH’s principal investigator.
- ➔ “Crete – Telematics Applications in Healthcare, Culture, and Public Administration”, Project Manager and Scientific Leader of the Health Telematics Applications, Funded by the Ministry of the National Economy of Greece in the framework of the INTERREG II Programme (1998-2000). Dr Tsiknakis is the Technical Coordinator of the Project.
- ➔ “TEMeTeN”, Towards a European Medical and Teleworking Network”, Project Leader and Scientific Leader of the Health Telematics Applications, Funded by the Regional Information Society Initiative of the European Commission (1997-1999). Dr Tsiknakis is the Project Administrative and Technical Coordinator.
- ➔ “INTERCARE”, Funded by the Telematics Applications Programme of the European Commission (1998-2000). Dr Tsiknakis is a member of the Project’s Management Board and the Technical Management Committee and FORTH’s principal investigator.
- ➔ “ATTRACT”, Funded by the Telematics Applications Programme of the European Commission (1998-2000). Dr Tsiknakis is a member of the Project’s Management Board and the Technical Management Committee and FORTH’s principal investigator.
- ➔ “RETRANSPLANT”, Funded by the Telematics Applications Programme of the European Commission (1998-2000). Dr Tsiknakis is a member of the Project’s Management Board and FORTH’s principal investigator.
- ➔ “TEN-TELEMED”, Funded by the TEN-TELECOM Programme of the European Commission (1998-1999). Dr Tsiknakis is a member of the Project’s Management Board and FORTH’s principal investigator.

### **Research Grants (Bradford University)**

- ➔ “Advanced Signal Processing Methods in Process Plant Monitoring”, School of Control Systems Engineering, University of Bradford, Bradford, U.K. Funded by the British National Research Council, Co-ordinator and principal investigator (1988 - 1989).
- ➔ “Digital signal processing in flow-measurement”, School of Control Systems Engineering, University of Bradford, Bradford, U.K. Funded by the British National Research Council, investigator (1985-1988).

### **Industry and Other Grants (Hellenic Mediteranean University)**

- ➔ “WeMP - Wellness Management Platform”, Industry contract for the design of a prototypical ambient assisted living platform, FORTHnet SA, 56.000 Euro (2015 – 2016).

- ➔ “MDSS - Multimedia Decision Support System”, Industry contract for the implementation of a clinical decision support system for stent positioning, SPIRIT SA, Budget: 40.000 Euro (2011-2012).

## Industry and Other Grants (ICS-FORTH)

- Integrated Regional Health Information Network of the 3<sup>rd</sup> Health System of Attica. Contract awarded by the Information Society S.A. following a public tender. FORTH’s Budget: 608.000 Euro (2005-2008).
- Integrated Regional Health Information Network of the Health System of Western Greece. Contract awarded by the Information Society S.A. following a public tender. FORTH’s Budget: 210.000 Euro (2005-2008).
- Integrated Regional Health Information Network of the Health System of North Aegean. Contract awarded by the Information Society S.A. following a public tender. FORTH’s Budget: 180.000 Euro (2005-2008).
- *Technical Consultancy and Systems Support Contracts* with the Hospitals of the Regional Health and Social System of Crete (2005 -2006). Budget: ~80.000 Euro
- *Technical Consultancy and Systems Support Contracts* with the Hospitals of the Regional Health and Social System of Crete (2004 -2005). Budget: ~100.000 Euro
- *Technical Consultancy and Systems Support Contracts* with the Hospitals of the Regional Health and Social System of Crete (2003 -2004). Budget: ~100.000 Euro
- Regional Health and Social Care System of South Aegean. *Development of an eHealth Network in the islands of Santorini, Thirasia, Folegandros, Sikinos and Anafi* (Aug. 2003 – Feb. 2004). Budget: 40.000 Euro
- South and East Belfast Health and Social Care Trust, *Installation of technology to support an Integrated Electronic Health Record in the Trust* (March 2002 – Aug. 2003). Budget: 17.000 Euro
- HealthSystemsExpertease S.A. (HSX), Netherlands. *Development of an Integrated Hospital Information System* (May 2001- Dec. 2003). Budget: 415.000 Euro
- Shared Medical Systems (SMS) – Europe S.A.. *Localisation and customisation of SMS-Europe’s medical information systems for the Greek healthcare market* (1999 –2000). Budget: 55.000 Euro
- Shared Medical Systems (SMS) – Europe S.A. *Assessment of the applicability of SMS products in the Greek Healthcare Market* (1998). Budget: 15.000 Euro
- Oncology University Clinic, University Hospital of Heraklion, Crete. *Analysis and Design of a Web-based environment to support multi-site clinical trials in oncology* (1996-1997). Budget: 25.000 Euro
- University Hospital of Heraklion. *Requirements analysis and design of an advanced networking infrastructure* (1996). Budget: 32.000 Euro

## Supervision of PhD Dissertations

1. Stefanos Gikas, A Pain Assessment Framework based on multimodal data and deep machine learning methods (in progress).
2. Roula Chatzaki, A multimodal approach for the assessment of mental stress based on the analysis of physiological signals (in progress).
3. Maria Evangelia Chatzimina, Conversational agents as a new diagnostic tool: a proof of concept study in the field of palliative care and depressive disorders (in progress).
4. An. Pampouchidou, Estimation of stress and depression based on visual information processing, University of Bourgogne (co-supervisor - <http://www.theses.fr/s198833>).

5. M. Pediaditis, *Vision-based human motion analysis in neurological disorders*, Technical University of Gratz, 2014 (co-supervisor).
6. J. Arif, *A Low Power Excitation Drive for Intelligent Electromagnetic Flowmeters*, University of Bradford, Bradford, West Yorkshire, U.K., 1991.

Prof Tsiknakis has also experience of participation in PhD examining bodies. Specifically he has recently been a member of the following PhD examining juries.

1. Member of the PhD jury of Pantelis Natsiavas, *Novel methods to support Active Pharmacovigilance in the clinical environment*, *Active Pharmacovigilance in the context of a Learning Healthcare System*, Sorbonne Université, Dec. 2020.
2. Member of the PhD jury of S. Sfakianakis, *Exploration of disease-specific biomarkers in Cancer Research by integrating biological knowledge and high throughput data*, Technical University of Crete, 2016.
3. Member of the Ph.D. jury of M. Pediaditis, *Vision-based human motion analysis in neurological disorders*, Department of Biomedical Engineering, Technical University of Gratz, Dec. 2014.
4. Member of the Ph.D. jury of Xia Zhao. The title of her PhD dissertation is "A linear logic approach to RESTful Web service modelling and composition", Department of Computer Science and Technology, University of Bedfordshire, Luton, UK, May 2013.
5. Member of the Ph.D. jury of Anna Hristoskova. The title of her PhD dissertation is "Design of semantic reasoning systems for management of next generation software services", Department of Information Technology (INTEC), Ghent University, Nov 2012.
6. Member of the Ph.D. jury of Samuli Niiranen. The title of his PhD thesis is "A Hybrid Model for the Application of Convergent ICT in Process-Specific Health Solutions", Digital Media Institute, Tampere University of Technology, 2010.

### Supervision of M.Sc. Dissertations

1. Stella Tsichlaki, Development of a Deep Learning Model for Dynamic Forecasting of Blood Glucose Level for Type 2 Diabetes Mellitus, Department of Electrical and Computer Engineering, Hellenic Mediterranean University (in progress).
2. Vangelis Chaniotakis, A Scalable Data Science Platform for Healthcare and Precision Medicine Research, Department of Computer Science, University of Crete, Co-supervisor (in progress).
3. A. Makridaki, Continuous and Categorical Assessment of Depression Based on Low Level Features, Department of Informatics Engineering, HMU, May 2018
4. K. Vazakopoulou, Continuous and Categorical Assessment of Depression Based on High Level Visual Features, Department of Informatics Engineering, HMU, March 2018
5. E. Strataki, Wellness Management and Positive Psychology App for smartphone platforms, Department of Informatics Engineering, HMU, 2016.
6. A. Tzedakis, Exploring Eye Activity as an Indication of human emotions, October 2016.
7. X. Atsalaki, Pathway Analysis for ChIP-seq Data, Department of Informatics Engineering, HMU, October 2016.
8. E. Christinaki, Signal Processing Methods for the Estimation of Physiological Parameters from Optical Recordings, Department of Informatics Engineering, HMU, July 2026.
9. R. Chatzaki, EEG-based Brain Computer Interaction for persons with motor impairments, Department of Informatics Engineering, HMU, June 2016.
10. M. Ligerakis, «Design and implementation of an active electrodes based EEG device, suitable for use in Steady State Visual Evoked Potentials (SSVEP) studies and applications» (joint supervisor with V. Sakkalis), Department of Informatics Engineering, HMU, July 2015.
11. Th. Malliotakis, Human Activity recognition based on smartphones, Department of Informatics Engineering, HMU, June 2015.

12. P. Kanaki, A framework for the implementation of computer interpretable clinical guidelines, Department of Informatics Engineering, HMU, June 2015.
13. D. Kounalakis, Cloud architectures and technologies for biomedical applications: Experimental evaluation of hybrid models, Department of Informatics Engineering, HMU, Oct. 2014.
14. P. Sfakianaki, Semantic service discovery using natural language processing techniques, Department of Informatics Engineering, HMU, June 2014.
15. V. Papoutsidis, *A biomedical GRID infrastructure enabling high-performing data mining and knowledge extraction operations*, University of Crete at Heraklion, Greece, February 2006
16. S. Kaoukakis, *Design, development and comparison of alternatives architectural approaches of communication based on HL7 Standard*, Department of Computer Science, University of Crete at Heraklion, Greece, June 2004.
17. A. Kontos, *Mobile and wearable technologies in Healthcare: A case study*, Department of Computer Science, University of Crete at Heraklion, Greece, December 2003.
18. Th. Tzelepis, *Designing Electronic Health Record Systems based on the Archetype methodology*, Department of Computer Science, University of Crete at Heraklion, Greece, October 2003.
19. Ch. Dimou, *Design and development of an internet based medical collaboration platform based on XML*, Department of Computer Science, University of Crete at Heraklion, Greece, September 2003.
20. E. Makrogamvrakis, *Design and implementation of an ECG viewer for a mobile and handheld computing platform*, The University of Kent at Canterbury, Kent, U.K., Sept 2001 (external supervisor).
21. N. Daliadakis, *Integration and testing of an electronic Spirometer in a HomeCare Telemonitoring platform*, The University of Kent at Canterbury, Kent, U.K., Sept 2001 (external supervisor).
22. D. Anthoulakis, *Design and Development of a Human Computer Interaction Environment to the Integrated Electronic Health Record*, University of Aberdeen, Scotland, Sept 2001 (external supervisor).
23. C. Chatzaki, *Design and development of the trust infrastructure employing smart cryptographic cards and PKI in health telematics networks*, Department of Computer Science, University of Crete at Heraklion, Greece, September 2001. (jointly with Prof. S.C. Orphanoudakis).
24. J. Lamb, *A Robot based temperature-monitoring system*, University of Bradford, Bradford, West Yorkshire, U.K., Sept. 1989.

## Supervision of Senior Theses

Prof. Tsiknakis has successfully supervised a large number of senior theses since becoming a member of the academic staff at the Hellenic Mediterranean University (previously Technological Educational Institute of Crete).

He has also, in the past, supervised several senior theses at the University of Crete and the University of Bradford.

## Publications

### Dissertations

1. M. Tsiknakis, *A Disk Drive Controller for the VME bus*, Master Thesis, School of Electric and Electronic Engineering, University of Bradford, Bradford, West Yorkshire, U.K., 1984.
2. M. Tsiknakis, *An Intelligent Electromagnetic Flowmeter Based on Novel Excitation Waveforms and Advanced Signal Processing*, Ph.D. Thesis, School of Control Systems Engineering, University of Bradford, Bradford, West Yorkshire, U.K., Dec. 1988.

### Key Note Speeches

1. M. Tsiknakis, *The European Cancer Informatics Landscape: Challenges for the biomedical informatics community*. The 8th IEEE International Conference on Bioinformatics and Bioengineering (BIBE 2008), Athens, Greece, 8-10 October 2008.

### Editorial Board of International Scientific Journals

- 2017 - Prof. Tsiknakis is an Associate Editor (<https://jbhi.embs.org/editorial-board/associate-editors/>) of the IEEE Journal in Biomedical and Health Informatics (*Impact Factor: 4.217*),
- 2018 - Prof. Tsiknakis is a member of the editorial board of the European Journal of Biomedical Informatics (<https://www.ejbi.org/editorial-board.html>), an official journal of the European Federation of Medical Informatics (EFMI)

### Editor of Special Issues in International Journals

1. Guest Editor, Special Issue on “*State-of-the-Art Sensors Technology in Greece 2020–2021*”, MPDI Sensors ([https://www.mdpi.com/journal/sensors/special\\_issues/In\\_Greece](https://www.mdpi.com/journal/sensors/special_issues/In_Greece)), Jan. 2021
2. Lead Guest Editor, Special Issue on “*Biomedical Informatics across the Cancer Continuum*”, M. Tsiknakis, N. Graf, K. Stamatopoulos, A. Bucur, IEEE Journal of Biomedical and Health Informatics, (<https://jbhi.embs.org/special-issues/>), May 31, 2018.
3. Guest Editor, Special issue on “*The Vision of Personally Managed Health Data: Barriers, Approaches and Roadmap for the Future*”, H. Kondylakis, K. Koumakis, M. Tsiknakis, S. Kiefer, Journal of Biomedical Informatics, (<https://www.journals.elsevier.com/journal-of-biomedical-informatics/call-for-papers/the-vision-of-personally-managed-health-data-barriers-approa>), September 30, 2018
4. Guest Editor, Special Issue on “*Advanced and Intelligent Technology for Dementia Care: Theory, Methods, and Applications*”, Po Yang, M. Tsiknakis, Li Da Xu, Wei Chen, IEEE Reviews in Biomedical Engineering, June 30, 2018
5. Guest Editor of the Special Issue on “*Computational solutions to large-scale data management and analysis in translational and personalized medicine*” of the IEEE Journal of Biomedical and Health Informatics (J-BHI) – formerly known as IEEE Transactions on Information Technology in Biomedicine, 2014.

### Papers in international journals (full-paper reviewed)

1. C. Chatzaki, V. Skaramagkas, M. Tsiknakis, et al, *The Smart-Insole Dataset: Gait analysis using wearable sensors with a focus on elderly and Parkinson’s patients*, Sensors, 2021 (accepted)

2. V. Skaramagkas, M. Tsiknakis, et al, Review of eye tracking metrics involved in emotional and cognitive processes, *IEEE Reviews in Biomedical Engineering*, 17 Mar 2021, DOI: [10.1109/rbme.2021.3066072](https://doi.org/10.1109/rbme.2021.3066072)
3. H. Kondylakis, M Tsiknakis, R. Zwigelaar, et al, Status and Recommendations of Technological and Data-Driven Innovations in Cancer Care: Focus Group Study, *J Med Internet Res* 2020;22(12):e22034, DOI: [10.2196/22034](https://doi.org/10.2196/22034)
4. H. Kondylakis, M. Tsiknakis, S. Kiefer, et al., Patient Empowerment for Cancer Patients through a Novel ICT Infrastructure, *Journal of Biomedical Informatics*, Volume 101, January 2020, 103342, <https://doi.org/10.1016/j.jbi.2019.103342>
5. C. Chatzaki, A. Goules, S. De Vita, A. Zabotti, C. Delporte, M.S. Soyfoo, F. Barone, B.A. Fisher, P. Brito-Zerón, E. Bartoloni, C.P. Mavragan, D.I. Fotiadis, A.G. Tzioufas, M. Tsiknakis, A Training Tool to support the management and diagnosis of Sjögren's syndrome, *Clinical and Experimental Rheumatology* 2020, S-174.
6. X. Atsalaki, L. Koumakis, G. Potamias, M. Tsiknakis, Chip-seq and gene expression data for the identification of functional sub-pathways: a proof of concept in lung cancer, doi: <https://doi.org/10.1101/2020.06.15.151712>
7. H. Kondylakis, L. Koumakis, M. Tsiknakis, S. Kiefer, Personally managed health data: Barriers, approaches and a roadmap for the future, *Journal of Biomedical Informatics*, 20 May 2020, DOI: [10.1016/j.jbi.2020.103440](https://doi.org/10.1016/j.jbi.2020.103440)
8. A. Pampouchidou, M. Padiaditis, E. Kazantzaki, S. Sfakianakis, I. A. Apostolaki, K. Argyraki, D. Manousos, F. Meriaudeau, K. Marias, F. Yang, M. Tsiknakis, M. Basta, A. N. Vgontzas, P. Simos. Automated facial video-based recognition of depression and anxiety symptom severity: cross-corpus validation, *Machine Vision and Applications* (2020) 31:30 <https://doi.org/10.1007/s00138-020-01080-7>
9. G. Giannakakis, M. Tsiknakis, and P. Vorgia. Focal epileptic seizures anticipation based on patterns of heart rate variability parameters. *Computer Methods and Programs in Biomedicine*, 178:123–133, 2019. DOI: <https://doi.org/10.1016/j.cmpb.2019.05.032> (IF: 3.424).
10. G. Z. Papadakis, A. H. Karantanas, M Tsiknakis, A., Tsatsakis, D. A Spandidos, & K. Marias, (2019). Deep learning opens new horizons in personalized medicine. *Biomedical Reports*, 10(4), 215-217, <https://doi.org/10.3892/br.2019.1199>
11. C. Spanakis, E. Mathioudakis, N. Kampanis, M. Tsiknakis, K.Marias, Machine-learning regression in evolutionary algorithms and image registration, *IET Image Processing*, Volume 13, Issue 5, April 2019, p. 843 – 849, DOI: [10.1049/iet-ipr.2018.5389](https://doi.org/10.1049/iet-ipr.2018.5389)
12. G. Giannakakis, D. Grigoriadis, K. Giannakaki, O. Simantiraki, A. Roniotis, M. Tsiknakis, Review on psychological stress detection using biosignals, *IEEE Transactions on Affective Computing* (Early Access), 09 July 2019, DOI: [10.1109/TAFFC.2019.2927337](https://doi.org/10.1109/TAFFC.2019.2927337), (IF: 6.288).
13. L. Koumakis , C. Chatzaki, E Kazantzaki, E. Maniadi, M. Tsiknakis, Dementia Care Frameworks and Assistive Technologies for Their Implementation: A Review, *IEEE Reviews in Biomedical Engineering*, Vol. 12, πππ. 4-18, DOI: [10.1109/RBME.2019.2892614](https://doi.org/10.1109/RBME.2019.2892614)
14. C. Spanakis, E. Mathioudakis, N. Kampanis, M. Tsiknakis, K. Marias, Machine-learning regression in evolutionary algorithms and image registration, *IET Image Processing*, Volume 13, Issue 5, 18 April 2019, p. 843 – 849, DOI: [10.1049/iet-ipr.2018.5389](https://doi.org/10.1049/iet-ipr.2018.5389)
15. K. Kourou, V. C. Pezoulas, E. I. Georga, T. Exarchos, P. Tsanakas, M. Tsiknakis, Th. Varvarigou, S. De Vita, A. Tzioufas, D. I. Fotiadis, *IEEE Reviews in Biomedical Engineering*, Ωολ. 12, πππ. 303-318, 11 July 2018, DOI: [10.1109/RBME.2018.2855055](https://doi.org/10.1109/RBME.2018.2855055)
16. G. Iatraki, H. Kondylakis, L. Koumakis, M. Chatzimina, E. Kazantzaki, K. Marias, M. Tsiknakis, Personal Health Information Recommender: implementing a tool for the empowerment of cancer patients, *Ecancermedicalscience*. 2018; 12: 851, doi: [10.3332/ecancer.2018.851](https://doi.org/10.3332/ecancer.2018.851)

17. A. Pampouchidou, P. Simos, K. Marias, F. Meriaudeau, F. Yang, M. Padiaditis, M. Tsiknakis, Automatic Assessment of Depression Based on Visual Cues: A Systematic Review, *IEEE Transactions on Affective Computing*, Issue: 99, Sept 2017, DOI: [10.1109/TAFFC.2017.2724035](https://doi.org/10.1109/TAFFC.2017.2724035)
18. A. Pampouchidou, M. Padiaditis, A. Maridaki, M. Awais, C. Vazakopoulou, S. Sfakianakis, M. Tsiknakis, P. Simos, K. Marias, F. Yang, F. Meriaudeau, Quantitative comparison of motion history image variants for video-based depression assessment, *EURASIP Journal on Image and Video Processing* 2017:64 <https://doi.org/10.1186/s13640-017-0212-3>
19. P. Rodriguez, M. Tsiknakis, et al, *Mirror mirror on the wall... an unobtrusive intelligent multisensory mirror for well-being status self-assessment and visualization*, *IEEE Transactions on Multimedia*, Volume: 19, Issue: 7, pp. 1467 – 1481, 2017, DOI: [10.1109/TMM.2017.2666545](https://doi.org/10.1109/TMM.2017.2666545)
20. C. Chatzaki, M. Padiaditis, G. Vavoulas, M. Tsiknakis, Human Daily Activity and Fall Recognition Using a Smartphone's Acceleration Sensor, *Communications in Computer and Information Science*, Springer. *Communications in Computer and Information Science*, volume 736, 20 July 2017.
21. H. Kondylakis, L. Koumakis, S. Hännold, I. Nwankwo, N. Forgó, K. Marias, M. Tsiknakis, N. Graf, Donor's Support Tool: Enabling Informed Secondary Use of Patient's Biomaterial and Personal Data, *International Journal of Medical Informatics*, January 2017, Volume 97, Pages 282–292, <https://doi.org/10.1016/j.ijmedinf.2016.10.019>
22. G. Giannakakis, M. Padiaditis, D. Manousos, E. Kazantzaki, F. Chiarugi, P.G. Simos, K. Marias, M. Tsiknakis, Stress and anxiety detection using facial cues from videos, *Biomedical Signal Processing and Control Journal*, Volume 31, January 2017, Pages 89–101, DOI: [10.1016/j.bspc.2016.06.020](https://doi.org/10.1016/j.bspc.2016.06.020)
23. L. Koumakis, A. Kanterakis, E. Kartsaki, M. Chatzimina, M. Zervakis, M. Tsiknakis, et al. MinePath: Mining for phenotype differential sub-paths in molecular pathways, *PLoS Computational Biology*, Nov. 2016, 12(11): e1005187. doi:[10.1371/journal.pcbi.1005187](https://doi.org/10.1371/journal.pcbi.1005187)
24. H. Kondylakis, B. Claerhout, M. Keyur, L. Koumakis, J. Van Leeuwen, K. Marias, D. Perez-Rey, K De Schepper, M. Tsiknakis, A. Bucur, The INTEGRATE project: Delivering solutions for efficient multi-centric clinical research and trials, *Journal of Biomedical Informatics*, Volume 62, August 2016, Pages 32–47, DOI: [10.1016/j.jbi.2016.05.006](https://doi.org/10.1016/j.jbi.2016.05.006)
25. E. Spanakis, S. Santana, K. Marias, V. Sakkalis, M. Tsiknakis, A. Teixeira, J. Janssen, H. Jong, H. Segal, Ch. Tziraki, *Technology-based Innovations to Foster Personalized Healthy LifeStyles and Wellbeing: A targeted Review*, *Journal of Medical Internet Research*, *J Med Internet Res* 2016;18(6):e128, DOI: [10.2196/jmir.4863](https://doi.org/10.2196/jmir.4863)
26. Y. Andreu, F. Chiarugi, S. Colantonio, G. Giannakakis, D. Giorgi, P. Henriquez, E. Kazantzaki, D. Manousos, K. Marias, B. J. Matuszewski, M. Antonietta Pascali, M. Padiaditis, G. Raccichini, M. Tsiknakis, *Wize Mirror - a smart, multisensory cardio-metabolic risk monitoring system*, *Computer Vision and Image Understanding*, Special issue on Assistive Computer Vision and Robotics - "Assistive Solutions for Mobility, Communication and HMI", Volume 148, July 2016, Pages 3–22, DOI: [10.1016/j.cviu.2016.03.018](https://doi.org/10.1016/j.cviu.2016.03.018)
27. L. Koumakis, G. Potamias, M. Tsiknakis, M. Zervakis, V. Moustakis, *Integrating Microarray Data and GRNs*, *Microarray Data Analysis*, Volume 1375 of the series *Methods in Molecular Biology*, pp 137-153, 02 July 2015.
28. P. Sfakianaki, L. Koumakis, S. Sfakianakis, G. Iatraki, G. Zacharioudakis, N. Graf, K. Marias, M. Tsiknakis, *Semantic Biomedical Resource Discovery: A Natural Language Processing Framework*, *BMC Medical Informatics and Decision Making*, 2015 15:77, DOI: [10.1186/s12911-015-0200-4](https://doi.org/10.1186/s12911-015-0200-4).
29. G. Giannakakis, V. Sakkalis, M. Padiaditis, M. Tsiknakis, *Methods for Seizure Detection and Prediction: an Overview*, *Neuromethods*, vol. 91, 2015, pp. 131-157.

30. E. Genitsaridi, H. Kondylakis, L. Koumakis, K. Marias, *M. Tsiknakis*, Evaluation of Personal Health Record Systems through the Lenses of EC Research Projects, 2015, *Computers in Biology and Medicine*, vol. 59, April 2015, pp. 175-185
31. G. Vavoulas, M. Pediaditis, C. Chatzaki, E. Spanakis, *M. Tsiknakis*, The MobiFall Dataset: Fall Detection and Classification with a Smartphone *International Journal of Monitoring and Surveillance Technologies Research*, vol. 2, Issue1, January-March 2014, pp. 44-56.
32. *M. Tsiknakis*, V. J. Promponas, N. Graf, M. D. Wang, S. T. C. Wong, N. Bourbakis, and C. S. Pattichis, Guest Editorial, *Computational Solutions to Large-Scale Data Management and Analysis in Translational and Personalized Medicine*. *IEEE J Biomed Health Inform*, Vol. 18, No. 3, May 2014, pp 720-722.
33. G.S. Stamatakos, D.D. Dionysiou, A. Lunzer, R. Belleman, E. Kolokotroni, E. Georgiadi, M. Erdt, F. Dong, S. Rueping, S. Giatili, A. d Onofrio, S.G. Sfakianakis, K. Marias, C. Desmedt, *M. Tsiknakis*, N. Graf, The Technologically Integrated Oncosimulator: Combining Multiscale Cancer Modeling with Information Technology in the In Silico Oncology Context, *IEEE J Biomed Health Inform*, Vol. 18, No. 3, May 2014, pp 840-854.
34. H. Kondylakis, E. Kazantzaki, L. Koumakis, E. Genitsaridi, K. Marias, A. Gorini, M. Mazzocco, G. Pravettoni, D. Burke, G. McVie, *M. Tsiknakis*, *Development of Interactive Empowerment services in support of personalized medicine*. *eCancer Medical Science Journal*, 2014, 8:400 DOI: [10.3332/ecancer.2014.400](https://doi.org/10.3332/ecancer.2014.400).
35. A. Hristoskova, V. Sakkalis, G. Zacharioudakis, *M. Tsiknakis*, F. De Turck, Ontology-Driven Monitoring of Patient's Vital Signs Enabling Personalized Medical Detection and Alert. *Sensors*, 2014, 14(1), 1598-1628.
36. A. Kouroubali, D.G. Katehakis, A. Berler, A., & *M. Tsiknakis*, Electronic Health Record: Luxury or Need? (in Greek). *Health Review Scientific Magazine*, 2013, 24(140), 5-9, Greece: Hellenic Health Services Management Association (HHSMA).
37. E. Genitsaridi, H. Kondylakis, L. Koumakis, K. Marias, *M. Tsiknakis*, Towards Intelligent Personal Health Record Systems: Review, Criteria and Extensions. *Procedia Computer Science*, 2013, 13, 327-334, (1877-0509).
38. M. Pediaditis, *M. Tsiknakis*, N. Leitgeb, Vision-based human motion detection, analysis and recognition in epilepsy: A systematic review, *Computer Methods and Programs in Biomedicine Journal*, Vol. 108, Issue 3, December 2012, pp. 1133-1148.
39. G. Tsiliki, M.Zervakis, M. Ioannou, E. Sanidas, E. Stathopoulos, G. Potamias, *M. Tsiknakis*, D. Kafetzopoulos, Multi-platform data integration in microarray analysis. *IEEE Trans Inf Technol Biomed*. Vol 15, No 6, November 2011, pp. 806-812.
40. K. Marias, D. Dionysiou, V. Sakkalis, N. Graf, R. M. Bohle, P. V. Coveney, S. Wan, A. Folarin, P. Büchler, M. Reyes, G. Clapworthy, E. Liu, J. Sabczynski, T. Bily, A. Roniotis, *M. Tsiknakis*, et al, Clinically driven design of multi-scale cancer models: the ContraCancrum project paradigm, *Interface Focus*, 2011, doi:10.1098/rsfs.2010.0037.
41. M. Brochhausen, G. Grigonyte, L. Martín, N. Graf, J. Haller, B. Smith, *M. Tsiknakis*, The ACGT Master Ontology and its applications – Towards an ontology-driven cancer research and management system. *J Biomed Inform*, Feb. 2011, 44(1), pp. 8-25.
42. *S. Sfakianakis*, *M. Blazantonakis*, *I. Dimou*, *M. Zervakis*, *M. Tsiknakis*, *G. Potamias*, *D. Kafetzopoulos*, *D. Lowe*, *Decision Support Based on Genomics: Integration of Data and Knowledge Driven Reasoning*, *International Journal of Biomedical Engineering and Technology* 2010, Vol. 3, No.3/4 pp. 287 - 307.
43. M. Zervakis, M.E. Blazadonakis, V. Danilatou, G. Tsiliki, *M. Tsiknakis*, D. Kafetzopoulos, Outcome Prediction Based on Microarray Analysis: A Critical Perspective on Methods, *BMC Bioinformatics* 2009, 10:53.
44. *M. Tsiknakis*, A. Kouroubali, Organizational factors affecting successful adoption of innovative eHealth services: A case study employing the FITT framework, *Int. J. Med. Inform*, 78 , 2009, pp. 39–52.

45. N. Graf, A. Hoppe, E. Georgiadi, R. Belleman, C. Desmedt, D. Dionysiou, M. Erdt, J. Jacques, E. Kolokotroni, A. Lunzer, M. Tsiknakis, G. Stamatakos, The impact of 'in silico' oncology on clinical decision making in the context of nephroblastoma, *Clinical Pediatrics, Klin Padiatr* 2009; 221: 1– 9.
46. N. Graf, C. Desmedt, F. Buffa, D. Kafetzopoulos, N. Forgó, R. Kollek, A. Hoppe, G. Stamatakos, M. Tsiknakis, *Post-genomic clinical trials: The perspective of ACGT*, *eCancerMedicalScience Journal*, 2008 (online journal), vol. 1, Article Num. 66, DOI:10.3332/eCMS.2007.66.
47. M. Tsiknakis, M. Brochhausen, J. Nabrzyski, J. Pucaski, S. Sfakianakis, G. Potamias, C. Desmedt and D. Kafetzopoulos, *A semantic grid infrastructure enabling integrated access and analysis of multilevel biomedical data in support of post-genomic clinical trials on Cancer*, *IEEE Transactions on Information Technology in Biomedicine*, Special issue on Bio-Grids, 2008, vol 12, no 2, pp. 191-204.
48. D.G. Katehakis, S. Sfakianakis, G. Kavlentakis, D. Anthoulakis, M. Tsiknakis, *Delivering a Lifelong Integrated Electronic Health Record based on a Service Oriented Architecture*, *IEEE Transactions on Information Technology in Biomedicine*, 2007, Vol 11, No 6, pp. 639-650.
49. M. Tsiknakis, S. Rueping, L. Martin, S. Sfakianakis, A. Bucur, T. Sengstag, M. Brohausen, J. Pucaski, *Developing a European Grid infrastructure for cancer research: vision, architecture, and services*, *eCancerMedicalScience Journal*, 2007 (online journal), vol. 1, Article Num.56, DOI:10.3332/eCMS.2007.56.
50. C. E. Chronaki, A. Kouroubali, A Stathopoulou, T Roumeliotaki, E. Orphanoudaki, E. Esterle, M. Tsiknakis, *Internet Use for Health and Illness in Greece: Preliminary Results of a European Study on eHealth Consumer Trends*, *Archives of Hellenic Medicine: ISSN 11-05-3992*, 2007, vol. 24, no. 5, pp. 440-457.
51. V. Maojo and M. Tsiknakis, *Biomedical Informatics and HealthGRIDs: A European Perspective*, *IEEE Engineering in Medicine and Biology Magazine*, May-June 2007, Vol. 26, No 3, pp 34-41.
52. D. Conforti, D. Costanzo, V. Lagani, F. Perticone, G. Parati, K. Kawecka-Jaszcz, A. Marsh, C. Biniaris, M. Stratakis, R. Fontanelli, D. Guerri, O. Salvetti, M. Tsiknakis, F. Chiarugi, D. Gamberger, M. Valentini, *HEARTFAID: A Knowledge Based Platform for Supporting the Clinical Management of Elderly Patients with Heart Failure*, *Journal of Information Technology in Healthcare* 2006; 4(5): 283–300.
53. M. Tsiknakis, D. Katehakis, S. Sfakianakis, G. Kavlentakis, S.C. Orphanoudakis, *An architecture for regional health information networks addressing issues of modularity and interoperability*, *Journal of Telecommunications and Information Technology (JTIT)*, 2005, vol. 4, pp.26-39.
54. K.G. Monsieurs, C. Vogels, L. L. Bossaert, P. Meert, A. Manganas, M. Tsiknakis, E. Leisch, P. A. Calle and F. Giorgini, *Learning effect of a novel interactive basic life support CD: the JUST system*, *Resuscitation*, 2004, vol. 62, no. 2, pp. 159-165.
55. T. Z. Tzelepis, M. Tsiknakis, D. G. Katehakis and S.C. Orphanoudakis, *Design and Implementation of "Two-level" Clinical Information Systems, based on Archetypes*, *International Journal for Quality of Life Research (J.Q.L.R.)*, 2004, vol. 2, no. 1, pp. 101-105.
56. A. Manganas, M. Tsiknakis, E. Leisch, M. Ponder, T. Molet, B. Herbelin, N. Magnenat-Thalmann, D. Thalmann, M. Fato, and A. Schenone, *The Just VR Tool: An Innovative Approach to Training Personnel for Emergency Situations Using Virtual Reality Techniques*, *The Journal of Information Technology in Healthcare*, 2004, vol. 2, no. 6, pp. 399-412.
57. C. Chronaki, F. Chiarugi, P.J. Lees, E. Charalambus, A. Sykianakis, G. Vrouchos, N. Antonakis, G. Frantzeskakis, M. Tsiknakis, S.C. Orphanoudakis, *Digital ECG Databases in the Regional Health Information Network of Crete*. *International Journal of Bioelectromagnetism, Advances in Electrocardiography*, 2003, vol. 5, no. 1, pp.118-120.

58. M. Tsiknakis, D. Katehakis, SC. Orphanoudakis, *An open, component-based information infrastructure for integrated health information networks*, International Journal of Medical Informatics, 2002, vol. 68, no. 1-3, pp 3-26.
59. D. Katehakis, M. Tsiknakis, SC. Orphanoudakis, *Towards an Integrated Electronic Health Record - Current Status and Challenges*. Journal of Global Healthcare, January 2002, pp. 1-4.
60. F. Chiarugi, D. Lombardi, PJ. Lees, C. Chronaki, M. Tsiknakis, SC. Orphanoudakis, *Support of Daily ECG Procedures in a Cardiology Department via the Integration of an Existing Clinical Database and a Commercial ECG Management System*. Annals of Noninvasive Electrocardiology, April 2002, vol. 7, No.2.
61. D. Katehakis, M. Tsiknakis, SC. Orphanoudakis, *A Healthcare Information Infrastructure to Support Integrated Services over Regional Health Telematics Networks*. Health IT Advisory Report, Medical Records Institute, 2001, vol. 4, no. 1, pp. 15-18.
62. D. Katehakis, S. Sfakianakis, M. Tsiknakis, and SC. Orphanoudakis, (2001) *An Infrastructure for Integrated Electronic Health Record Services: The Role of XML*. Journal of Medical Internet Research, vol. 3, no. 1, e7.
63. C. Chronaki, M. Tsiknakis, SC. Orphanoudakis, *Virtual Workspaces in P-Cnet*. International Journal of Medical Informatics, 1997, vol. 47, no. 1-2, pp. 115-119.
64. M. Tsiknakis, C. Chronaki, S. Kapidakis, C. Nikolaou, SC. Orphanoudakis, *An Integrated Architecture for the Provision of Health Telematic Services Based on Digital Library Technologies*, International Journal on Digital Libraries, 1997, vol. 1, no. 3, pp. 257-277.
65. C. Chronaki, D. Katehakis, X. Zabulis, M. Tsiknakis, SC. Orphanoudakis, *WebOnCOLL: Medical Collaboration in Regional Healthcare Networks*, IEEE Transactions on Information Technology in Biomedicine, 1997, vol. 1, no. 4, pp. 257-269.
66. E. Leisch, S. Sartzetakis, M. Tsiknakis, SC. Orphanoudakis, *A Framework for the Integration of Distributed Autonomous Healthcare Information Systems*, Journal of Medical Informatics, 1997, vol. 22, no. 4, pp. 325-335.
67. SC. Orphanoudakis, E. Kaldoudi, M. Tsiknakis, *Technological Advances in Teleradiology*, European Journal of Radiology, 1996, vol. 22, pp. 205-217.
68. M. Tsiknakis, D. Katehakis, S.C. Orphanoudakis, *Intelligent Image Management in a Distributed PACS and Telemedicine Environment*, IEEE Communications Magazine, 1996, vol. 34, no. 7, pp. 36-45.
69. R. Fell, M. Tsiknakis, A. Ajayi, (1987), *Signal Processing in Flow Measurement*, Journal of Measurement and Instrumentation (Elsevier, ISSN: 0955-5986), Special issue on Intelligent Instrumentation, vol. 1, no. 1, pp. 1 - 10.

## Papers in National Scientific Journals

1. A. Kouroubali, D.G. Katehakis, A. Berler, A., & M. Tsiknakis, *Electronic Health Record: Luxury or Need? (in Greek)*. Health Review Scientific Magazine, 2013, 24(140), 5-9, Greece: Hellenic Health Services Management Association (HHSMA).

## Papers in Proceedings of International Conferences (full-paper reviewed)

1. A. Kyriakakis, L. Koumakis, A. Kanterakis, G.Iatraki, M. Tsiknakis, G. Potamias, *Enabling Ontology-based Search: A Case Study in the Bioinformatics Domain*, in Proc. of the 19<sup>th</sup> IEEE International Conference on Bioinformatics and Bioengineering 2019 (BIBE 2019), Athens, Oct. 2019, Greece.
2. G.Manikis, M. Tsiknakis and P. Simos, et al. *Computational modeling of psychological resilience trajectories during breast cancer treatment*, in Proc. of the 19<sup>th</sup> IEEE International

- Conference on Bioinformatics and Bioengineering 2019 (BIBE 2019), Athens, Oct. 2019, Greece.
3. M. Chatzimina, L. Koumakis, K. Marias, M. Tsiknakis, Engaging Conversational Agents in Palliative Care: A feasibility study and Preliminary Assessment, in Proc. of the 19<sup>th</sup> IEEE International Conference on Bioinformatics and Bioengineering 2019 (BIBE 2019), Athens, Oct. 2019, Greece
  4. G. Giannakakis, E. Trivizakis, K. Marias, M. Tsiknakis, A novel multi-kernel 1D convolutional neural network for stress recognition from ECG, 2019 8th International Conference on Affective Computing and Intelligent Interaction Workshops and Demos (ACIIW), London, UK.
  5. G. Giannakakis, K. Marias, M. Tsiknakis, A stress recognition system using HRV parameters and machine learning techniques, 2019 8th International Conference on Affective Computing and Intelligent Interaction Workshops and Demos (ACIIW), London, UK.
  6. H. Kondylakis, L. Koumakis, D.G. Katehakis, A. Kouroubali, K. Marias, M. Tsiknakis, P.G. Simos, E. Karademas, Developing a Data Infrastructure for Enabling Breast Cancer Women to BOUNCE Back, In Proceedings of the IEEE 32nd International Symposium on Computer-Based Medical Systems (CBMS), 5-7 June 2019, Cordoba, Spain DOI: [10.1109/CBMS.2019.00134](https://doi.org/10.1109/CBMS.2019.00134)
  7. H. Kondylakis, L. Koumakis, M. Tsiknakis, K. Marias, Implementing a data management infrastructure for big healthcare data, 2018 IEEE EMBS International Conference on Biomedical & Health Informatics (BHI), 4-7 March 2018, Las Vegas, USA, DOI: [10.1109/BHI.2018.8333443](https://doi.org/10.1109/BHI.2018.8333443)
  8. C. Spanakis, E. Mathioudakis, M. Tsiknakis, N. Kampanis, K. Marias, Function Approximation for Medical Image Registration, 2018 41st International Conference on Telecommunications and Signal Processing (TSP), 4-6 July 2018, Athens, Greece, DOI: [10.1109/TSP.2018.8441336](https://doi.org/10.1109/TSP.2018.8441336)
  9. G. Iatraki, H. Kondylakis, L. Koumakis, M. Chatzimina, K. Marias, M. Tsiknakis, Personal Health Information Recommender: A Tool for the Empowerment of Cancer Patients, eCancer Medical Science, 2018
  10. G. Giannakakis, D. Manousos, V. Chaniotakis, M. Tsiknakis, Evaluation of head pose features for stress detection and classification, IEEE EMBS International Conference on Biomedical & Health Informatics (BHI), 4-7 March 2018, Las Vegas, US, 2018, DOI: [10.1109/BHI.2018.8333454](https://doi.org/10.1109/BHI.2018.8333454)
  11. H. Kondylakis, L. Koumakis, M. Tsiknakis, K. Marias, Implementing a data management infrastructure for big healthcare data, IEEE EMBS International Conference on Biomedical & Health Informatics (BHI), 4-7 March 2018, Las Vegas, US, 2018, DOI: [10.1109/BHI.2018.8333443](https://doi.org/10.1109/BHI.2018.8333443)
  12. G. Giannakakis, D. Manousos, P. Simos, M. Tsiknakis, Head movements in context of speech during stress induction, Face and Gesture Analysis for Health Informatics, IEEE Conference on Automatic Face and Gesture Recognition, May 15-19, 2018, China.
  13. A. Maridaki, A. Pampouchidou, K. Marias, M. Tsiknakis. Machine Learning Techniques for Automatic Depression Assessment. 41st IEEE International Conference on Telecommunications and Signal Processing, Athens, Greece, Jul.2018.
  14. C-M. Vazakopoulou, A. Pampouchidou, F. Yang, F. Meriaudeau, K. Marias, M. Tsiknakis. Détection de la dépression par l'analyse de la géométrie faciale et apprentissage automatique, Congrès National de la Recherche des IU "CNRIUT'2018", Aix-en-Provence, Jun.2018
  15. D. Bourou, A. Pampouchidou, M. Tsiknakis, K. Marias, P. Simos. Video-based Pain Level Assessment: Feature Selection and Inter-Subject Variability Modelling, 41st IEEE International Conference on Telecommunications and Signal Processing, Athens, Greece, Jul.2018.

16. O. Simantiraki, P. Charonyktakis, A. Pampouchidou, M. Tsiknakis, M. Cooke, Glottal Source Features for Automatic Speech-Based Depression Assessment, INTERSPEECH 2017, August 20–24, 2017, Stockholm, Sweden, DOI:10.21437/Interspeech.2017-1251.
17. A Pampouchidou, O. Simantiraki, C. Vazakopoulou, K. Marias, P. Simos, F. Yang, F. Meriaudeau, M. Tsiknakis, "Detection de la dépression par l'analyse de la géométrie faciale et de la parole", GRETSI -Traitement du Signal et des Images, Sept. 2017, France.
18. E. Kazantzaki, L. Koumakis, H. Kondylakis, C. Renzi, C. Fioretti, K. Mazzocco, K. Marias, M. Tsiknakis, G. Prevettoni, Current trends in Electronic Family Resilience Tools: Implementing a tool for the cancer domain, European Medical and Biological Engineering Conference, EMBEC 2017 pp 29-32.
19. A. Pampouchidou, O. Simantiraki, C. Vazakopoulou, C. Chatzaki, M. Pediaditis, A. Maridaki, K. Marias, P. Simos, F. Yang, F. Meriaudeau, M. Tsiknakis, "*Facial Geometry and Speech Analysis for Depression Detection*", 39th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, February 21, 2017, Korea.
20. A. Pampouchidou, M. Tsiknakis, et al, *Depression Assessment by Fusing High and Low Level Features from Audio, Video, and Text*, The 6<sup>th</sup> Audio/visual Emotion Challenge and Workshop, ACM Multimedia 2016 Conference, Oct 2016, Amsterdam.
21. A. Pampouchidou, M. Pediaditis, K. Marias, P. Simos, F. Yang, F. Meriaudeau, M. Tsiknakis, *Automated Characterization of Mouth Activity for Stress and Anxiety Assessment*, IEEE International Conference on Imaging Systems and Techniques 2016 (IST 2016).
22. A. Pampouchidou, K. Marias, M. Tsiknakis, P. Simos, F. Yang, F. Meraudeau, *Video-Based Depression Detection Using Local Curvelet Binary Patterns in Pairwise Orthogonal Planes*, 38th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC 2016), Orlando, Aug 2016.
23. M. Spanakis, E.G. Spanakis, H. Kondylakis, S. Sfakianakis, I. Genitsaridi, V. Sakkalis, M. Tsiknakis, K. Marias, *Addressing Drug-drug and Drug-food Interactions through Personalized Empowerment Services for Healthcare*, 38th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC 2016), Orlando, Aug 2016.
24. G. Vavoulas, R. Chatzaki, Th. Malliotakis, M. Pediaditis, M. Tsiknakis, *The MobiAct Dataset: Recognition of Activities of Daily Living using Smartphones*. In Proceedings of the International Conference on Information and Communication Technologies for Ageing Well and e-Health (ICT4AWE 2016), pages 143-151, April 2016, Rome, Italy, ISBN: [978-989-758-180-9](#).
25. G. Giannakakis, M. Pediaditis, G. Stavriniadis, G. Konstantinidis, V. Kritsotakis, V. Tsakanikas, M. Ligerakis, V. Sakkalis, P. Vorgia, M. Tsiknakis, *A computational platform for continuous seizure anticipation, monitoring and clinical evaluation*, 13<sup>th</sup> International Conference on Wearable, Micro and Nano Technologies for Personalised Health (pHealth 2016), April 2016, Heraklion, Crete and in Studies in Health Technology and Informatics, Volume 224, Pages 108 – 113, 2016, DOI: [10.3233/978-1-61499-653-8-108](#).
26. A. Pampouchidou, E. Kazantzaki, I. Karatzanis, K. Marias, M. Tsiknakis, F. Meriaudeau, F. Yang, P. Simos, *Preliminary Evaluation of a Web-Oriented Assessment Tool for Emotion Recognition*, 13<sup>th</sup> International Conference on Wearable, Micro and Nano Technologies for Personalised Health (pHealth 2016), April 2016, Heraklion, Crete and in Studies in Health Technology and Informatics, Volume 224, Pages 95-100, DOI: [10.3233/978-1-61499-653-8-95](#).
27. L. Koumakis, H. Kondylakis, M. Chatzimina, G. Iatraki, P. Argyropaidas, E. Kazantzaki, M. Tsiknakis, S. Kiefer, K. Marias, *Designing smart analytical data services for a personal health framework*, 13<sup>th</sup> International Conference on Wearable, Micro and Nano Technologies for Personalised Health (pHealth 2016), April 2016, Heraklion, Crete and in Studies in Health Technology and Informatics, Volume 224, Pages 123 – 128, DOI: [10.3233/978-1-61499-653-8-123](#).

28. E. Kazantzaki, H. Kondylakis, L. Koumakis, K. Marias, M. Tsiknakis, C. Fioretti, A. Gorini, K. Mazzocco, C. Renzi, G. Pravettoni, *Psycho-emotional tools for better treatment adherence and therapeutic outcomes for cancer patients*, 13<sup>th</sup> International Conference on Wearable, Micro and Nano Technologies for Personalised Health (pHealth 2016), April 2016, Heraklion, Crete and in *Studies in Health Technology and Informatics*, Volume 224, Pages 129 – 134, DOI: [10.3233/978-1-61499-653-8-129](https://doi.org/10.3233/978-1-61499-653-8-129).
29. C. Chatzaki, M. Pediaditis, G. Vavoulas, M. Tsiknakis, *Estimating normal and abnormal activities using smartphones*, 13<sup>th</sup> International Conference on Wearable, Micro and Nano Technologies for Personalised Health (pHealth 2016), April 2016, Heraklion, Crete and in *Studies in Health Technology and Informatics*, Volume 224, Pages 195 – 200, DOI: [10.3233/978-1-61499-653-8-195](https://doi.org/10.3233/978-1-61499-653-8-195).
30. G. Giannakakis, D. Grigoriadis, M. Tsiknakis, *Detection of stress/anxiety state from EEG features during films watching*, *37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBS)*, Milano, Italy, August 25th-29th, 2015.
31. C. Thermolia, E.S. Bei, S. Sotiriadis, K. Stravoskoufos, E.G.M. Petrakis, V. Kritsotakis, M. Tsiknakis, V. Sakkalis, *Designing a patient monitoring system using semantic web technologies*, *37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBS)*, Milano, Italy, August 25th-29th, 2015.
32. H. Kondylakis, E.G. Spanakis, S. Sfakianakis, V. Sakkalis, M. Tsiknakis, K. Marias, X. Zhao, H. Qing Yu, F. Dong, *Digital Patient: Personalized and Translational Data Management through the MyHealthAvatar EU Project*, *37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBS)*, Milano, Italy, August 25th-29th, 2015.
33. M. Pediaditis, G. Giannakakis, F. Chiarugi, D. Manousos, A. Pampouchidou, E. Christinaki, G. Iatraki, E. Kazantzaki, P. G. Simos, K. Marias and M. Tsiknakis, *Extraction of Facial Features as Indicators of Stress and Anxiety*, *37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBS)*, Milano, Italy, August 25th-29th, 2015.
34. A. Pampouchidou, K. Marias, M. Tsiknakis, P. Simos, F. Yang, F. Meriaudeau, *Designing a Framework for Assisting Depression Severity Assessment from Facial Image Analysis*, *The IEEE International Conference on Signal and Image Processing Applications 2015 (ICSIPA 2015)*, Malaysia, Oct 2015.
35. A. Pampouchidou, M. Pediaditis, F. Chiarugi, K. Marias, F. Meriaudeau, F. Yang, M. Tsiknakis, *Mouth Activity Recognition Based on Template-Matching and Eigen-Features*, *18th International Conference on Image Analysis and Processing ICIAP 2015* Genova, Italy, 7-11 September, 2015.
36. I. Genitsaridi, K. Marias, M. Tsiknakis, *An Ontological Approach towards Psychological Patient Profiling in Pervasive Computing Environments: A case study on Breast Cancer Patients*, *8th International Conference on Pervasive Technologies Related to Assistive Environments (PETRA 2015)*, Corfu, July 1-2 2015.
37. N. Hochedlinger, M. Nitzlnader, M. Falgenhauer, S. Welte, D. Hayn, L. Koumakis, G. Potamias, M. Tsiknakis, D. Saraceno, E. Rinaldi, R. Ladenstein, G. Schreier, *Standardized Data Sharing in a Paediatric Oncology Research Network – A Proof-of-Concept Study*, In *proceedings of the eHealth2015 – Health Informatics Meets eHealth*, IOS Press, D. Hayn et al. (Eds.), 2015, pp. 27 – 34, doi:10.3233/978-1-61499-524-1-27.
38. E. Christinaki, G. Giannakakis, F. Chiarugi, M. Pediaditis, G. Iatraki, D. Manousos, K. Marias, M. Tsiknakis. *Comparison of blind source separation algorithms for optical heart rate monitoring*, *4th International Conference on Wireless Mobile Communication and Healthcare, Athens, Greece, November 3-5, 2014*.
39. D. Manousos, G. Iatraki, E. Christinaki, M. Pediaditis, F. Chiarugi, M. Tsiknakis, K. Marias. *Contactless detection of facial signs related to stress: a preliminary study*. *4th International Conference on Wireless Mobile Communication and Healthcare, Athens, Greece, November 3-5, 2014*.

40. H. Kondylakis, L. Koumakis, S. Rüping, E. Kazantzaki, K. Marias, M. Tsiknakis: *PMIR: A Personal Medical Information Recommender*, Medical Informatics Europe (MIE), 205, pp. 1193 -1197, Istanbul, Turkey, 2014.
41. I. Karatzanis, T. Iliopoulos, K. Marias, M. Tsiknakis, V. Sakkalis, A collaborative central reviewing platform for cancer detection in digital microscopy images. 6th IEEE International Advanced Research Workshop on In Silico Oncology and Cancer Investigation (IARWISOCI), p. 1-5, Athens, Nov 4, 2014.
42. H. Yu, X. Zhao, X. Zheng, F. Dong, E. Liu, G. Clapworthy, K. Marias, M. Spanakis, M. Tsiknakis, V. Sakkalis, S. Sfakianakis, H. Kondylakis, *Healthcare-Event Driven Semantic Knowledge Extraction with Hybrid Data Repository*, 40<sup>th</sup> International Conference on Very Large Data Bases (VLDB 2014), China, Sept 1-5.
43. P. Sfakianaki, L. Koumakis, S. Sfakianakis, M. Tsiknakis, *Efficient biomedical service discovery: A feasibility study and preliminary results*, In proceedings of the 17th International Conference on Business Information Systems (BIS 2014), Larnaca, Cyprus, 22-23 May, 2014, Also in Lecture Notes in Business Information Processing series, Springer Verlag.
44. L. Koumakis, G.A. Potamias, S. Sfakianakis, V. Moustakis, M.E. Zervakis, N. Graf, M. Tsiknakis, *miRNA based pathway analysis tool in nephroblastoma as a proof of principle for other cancer domains*. IEEE 14th International Conference on Bioinformatics and Bioengineering (BIBE 2014). Boca Raton, USA, 2014.
45. H. Kondylakis, L. Koumakis, S. Ruping, E. Kazantzaki, K. Marias, M. Tsiknakis. *PMIR: A Personal Medical Information Recommender*. Medical Informatics Europe (MIE), 2014. Also in *Studies in Health Technology and Informatics, Volume 205: e-Health – For Continuity of Care*, C. Lovis et al. (Eds.).
46. E.G. Spanakis, P. Yang, Z. Deng, V. Sakkalis, D. Kafetzopoulos, K. Marias, M. Tsiknakis, F. Dong, *MyHealthAvatar: personalized and empowerment health services through Internet of Things technologies*”, 4th International Conference on Wireless Mobile Communication and Healthcare, November 3-5, 2014, Athens, Greece
47. F. Chiarugi, G. Iatraki, E. Christinaki, D. Manousos, G. Giannakakis, M. Padiaditis, A. Pampouchidou, K. Marias and M. Tsiknakis, *Facial Signs and Psycho-physical Status Estimation for Well-being Assessment*, In Proceedings of the International Conference on Health Informatics (ICHI 2014), Special Session on “Signals and Signs Understanding for Personalized Guidance to Promote Healthy Lifestyles (SUPERHEAL 2014), Angers, France, 3-6- March 2014. , pages555-562, DOI: 10.5220/0004934405550562.
48. F. Chiarugi, E. Christinaki, S. Colantonio, P. Marraccini, M. Padiaditis, O. Salvetti, M. Tsiknakis, *A Virtual Individual’s Model Based on Facial Expression Analysis: a Non-Intrusive Approach for Wellbeing Monitoring and Self- Management*, In Proceedings of the 13th IEEE International Conference on Bioinformatics and BioEngineering, 2013, DOI: [10.1109/BIBE.2013.6701562](https://doi.org/10.1109/BIBE.2013.6701562)
49. E. Maniadi, H. Kondylakis, E.G. Spanakis, M. Spanakis, M. Tsiknakis, K. Marias, F. Dong, *Designing a digital patient avatar in the context of the MyHealthAvatar project initiative*. 13th IEEE International Conference on Bioinformatics and BioEngineering (BIBE) 2013, 10-13 Nov. 2013, DOI: [10.1109/BIBE.2013.6701560](https://doi.org/10.1109/BIBE.2013.6701560)
50. M. Antonakakis, G. Giannakakis, M. Tsiknakis, S. Micheloyannis, M.E. Zervakis, *Synchronization coupling investigation using ICA cluster analysis in resting MEG signals in reading difficulties*, In Proceedings of the IEEE 13th International Conference on Bioinformatics and Bioengineering (BIBE), 2013, 10-13 Nov. 2013, pp. 1-5, DOI: [10.1109/BIBE.2013.6701594](https://doi.org/10.1109/BIBE.2013.6701594)
51. G. Vavoulas, M. Padiaditis, M. Spanakis, M. Tsiknakis, *The MobiFall Dataset: An Initial Evaluation of Fall Detection Algorithms Using Smartphones*, In proceedings of the 6th IEEE International Symposium on Monitoring & Surveillance Research (ISMSR): Healthcare-Bioinformatics, 10-13 Nov. 2013, DOI: [10.1109/BIBE.2013.6701629](https://doi.org/10.1109/BIBE.2013.6701629).

52. G. Giannakakis, V. Sakkalis, M. Pediaditis, C. Farmaki, P. Vorgia, M. Tsiknakis, An approach to absence epileptic seizures detection using approximate entropy, 35th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'13), Osaka, Japan, July 3-7, 2013, pp. 413 – 416.
53. V. Sakkalis, G. Giannakakis, C. Farmaki, A. Mousas, M. Pediaditis, P. Vorgia, M. Tsiknakis, Absence Seizure Detection in generalized Epilepsies using linear and nonlinear EEG analysis method, 35th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'13), Osaka, Japan, July 3-7, 2013, pp. 6333-6336.
54. M. Tsiknakis, S.G. Sfakianakis, K. Marias, N. Graf, *A technical infrastructure to support personalized medicine*. In Proceedings of the IEEE 12th International Conference on Bioinformatics & Bioengineering (BIBE), 11-13 November 2012, Cyprus.
55. H. Kondylakis, L. Koumakis, E. Genitsaridi, M. Tsiknakis, K. Marias, G. Pravettoni, A. Gorini, M. Mazzocco, IEmS: A collaborative Environment for Patient Empowerment, In Proceedings of the IEEE International Conference on Bioinformatics and BioEngineering (BIBE), 11-13 November 2012, Cyprus.
56. P. Vorgia, M. Pediaditis, V. Kritsotakis, H. Dimitriou, M. Tsiknakis, S. Voutoufianakis, V. Danilatou, D. Kafetzopoulos, D.I. Fotiadis, *HERCULES: Developing an integrated health care scheme, based on biomedical genetics, advanced biomedical informatics and computer vision for early diagnosis, monitoring and treatment of children with neurological disorders in Greece. Pilot application in absence like seizures*, In Proceedings of the 10th European Congress on Epileptology, 2012.
57. N. Graf, M Tsiknakis, et al, *p-medicine: From data sharing and integration via VPH tools to personalized medicine*, In Proceedings of the Virtual Physiological Human Conference (VPH 2012), London, UK, 18 – 20 September 2012.
58. M. Pediaditis, M. Tsiknakis, E. Koumakis, M. Karachaliou, S. Voutoufianakis, P. Vorgia, Vision-Based Absence Seizure Detection, In proceedings of the 34th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'12), San Diego, California, USA, August 28 - September 1, 2012.
59. H. Kondylakis, M. Tsiknakis, Computerized Clinical Guidelines: Current Status & Directions for Future Research, In proceedings of the Medical Informatics Europe 2012 (MIE 2012), pp. 432-436, Pisa, Italy, Aug. 2012. Also available at Studies in Health Technology and Informatics, Volume 180, 2012, Quality of Life through Quality of Information - Proceedings of MIE2012, Edited by John Mantas, Stig Kjær Andersen, Maria Christina Mazzoleni, Bernd Blobel, Silvana Quaglini, Anne Moen.
60. M. Pediaditis, M. Tsiknakis, M. Góralczyk, P. Vorgia, *Exploiting Advanced Video Analysis Technologies for a Smart Home Monitoring Platform for Epileptic Patients: Technological and Legal Preconditions*, In proceedings of the International Conference on Telecommunications and Multimedia 2012 (TEMU 2012), Crete, Greece, July 2012.
61. E.G. Spanakis, M. Tsiknakis, *Delivery of secure eHealth services and communications*, International Conference on Telecommunication Systems - Modeling and Analysis 2012 (ICTSM2012), Prague, Czech Republic, May 24-26, 2012.
62. A. Hristoskova, V. Sakkalis, G. Zacharioudakis, M. Tsiknakis, F. De Turck, "Ontology-Driven Monitoring of Patient's Vital Signs Enabling Personalized Medical Detection and Alert" in: Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering (LNICST), K.S. Nikita et al. (Eds.): MobiHealth 2011, vol. 83, pp. 217–224, ISBN 978-3-642-29733-5 (Print) 978-3-642-29734-2 (Online), Springer 2012 (available online: DOI: [10.1007/978-3-642-29734-2\\_30](https://doi.org/10.1007/978-3-642-29734-2_30)).
63. M. Pediaditis, M. Tsiknakis, V. Bologna and P. Vorgia, Model-Free Vision-Based Facial Motion Analysis in Epilepsy, 10th International Workshop on Biomedical Engineering, Mobihealth 2011, Kos, Greece, 5-7 October, 2011. DOI: [10.1109/IWBE.2011.607905](https://doi.org/10.1109/IWBE.2011.607905).
64. L. Martin, A. Anguita, N. Graf, M. Tsiknakis, M. Brochhausen, S. Rüping, A. Bucur, S. Sfakianakis, T. Sengstag, F. Buffa, H. Stenzhorn, *ACGT: Advancing Clinico-genomic trials on*

- cancer - Four years of experience*, MIE 2011, Oslo, Norway, August 2011, Stud Health Technol Inform. 2011; 169: 734-8.
65. K. Marias, G. Stamatakos, D. Dionysiou, V. Sakkalis, S. Sfakianakis, M Tsiknakis, *Computational Services for In Silico Oncology: experiences and research challenges*, 7th GRACM International Congress on Computational Mechanics, Special session on Computational Bioengineering, Athens, June 2011.
  66. A. Bucur, S. Rüping, T. Sengstag, S. Sfakianakis, M. Tsiknakis, D. Wegener. *The ACGT project in retrospect: Lessons learned and future outlook*. Procedia Computer Science, 4:1119 - 1128, 2011. Proceedings of the International Conference on Computational Science, ICCS 2011, Japan, June 2011.
  67. L. Martin, A. Anguita, N. Graf, M. Tsiknakis, M. Brochhausen, S. Rueping, A. Bucur, S. Sfakianakis, H. Stenzhorn, *ACGT: Advancing Clinico-genomic trials on cancer – Four years of experience*, AMIA 2010 Annual Symposium, Washington DC, 13-15 November 2010.
  68. M. Tsiknakis, M. Spanakis, *Adoption of innovative eHealth services in prehospital emergency management: a case study*, 10th IEEE International Conference, 10th IEEE International Conference on Information Technology and Applications in Biomedicine (ITAB 2010), Nov 2010, Corfu, Greece.
  69. S. Sfakianakis, M. Zervakis, M. Tsiknakis, D. Kafetzopoulos, *Integration of Biological Knowledge in the Mixture-of-Gaussians Analysis of Genomic Clustering*, 10th IEEE International Conference on Information Technology and Applications in Biomedicine (ITAB 2010), Nov 2010, Corfu, Greece.
  70. M. Pediaditis, M. Tsiknakis, P. Vorgia, D. Kafetzopoulos, V. Danilatou, D. Fotiadis, *Vision-Based Human Motion Analysis in Epilepsy – Methods and Challenges*, 10th IEEE International Conference on Information Technology and Applications in Biomedicine (ITAB 2010), Nov 2010, Corfu, Greece.
  71. H. Stenzhorn, G. Weiler, M. Brochhausen, F. Schera, V. Kritsotakis, M. Tsiknakis, S. Kiefer, N. Graf, *The ObTiMA System – Ontology-based Managing of Clinical Trials*, 13th International Congress on Medical Informatics (MEDINFO 2010), South Africa, 12 - 15 of September 2010.
  72. A. Kanterakis, G. Zacharioudakis, L. Koumakis, G. Potamias, S. Sfakianakis, M. Tsiknakis, *Scientific discovery workflows in bioinformatics: A scenario for the coupling of molecular regulatory pathways and gene-expression profiles*, 13th International Congress on Medical Informatics (MEDINFO 2010), South Africa, 12 - 15 of September 2010 and in Stud Health Technol Inform. 160, 1304-1308.
  73. M. Tsiknakis, S. Sfakianakis, G. Zacharioudakis, L. Koumakis, *A framework supporting sharing and reuse of data and tools in translational cancer research: Lessons learned for VPH research*, 4th International Advanced Research Workshop on In Silico Oncology and Cancer Investigation (IARWISO), September 2010, Athens, Greece.
  74. L. Koumakis, A. Kanterakis, G. Potamias, S. Sfakianakis, G. Zacharioudakis, M. Tsiknakis, *Analyzing gene regulatory networks and gene expression profiles via scientific workflows*, International Conference on Biomedical Data & Knowledge Mining: Towards Biomarker Discovery, 7-9 July 2010, Chania, Greece.
  75. G. Grigonyte, M. Brochhausen, L. Martin, M. Tsiknakis, J. Haller, *Evaluating Ontologies with NLP-Based Terminologies – A Case Study on ACGT and Its Master Ontology*, 6th International Conference on Formal Ontology in Information Systems (FOIS), Toronto, Canada, May 11-14, 2010.
  76. M. Tsiknakis, S. Sfakianakis, G. Zacharioudakis, L. Koumakis, A. Kanterakis, G. Potamias, D. Kafetzopoulos, *A semantically aware platform for the authoring and secure enactment of bioinformatics workflows*, 31st Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'09), September 2-6, 2009, Minneapolis, USA.
  77. L. Koumakis, V. Moustakis, M. Tsiknakis, D. Kafetzopoulos, G. Potamias, *Supporting Genotype-to-Phenotype Association Studies with Grid enabled Knowledge Discovery*

- Workflows*, 31st Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'09), September 2-6, 2009, Minneapolis, USA.
78. G. Zacharioudakis, L. Koumakis, S. Sfakianakis, M. Tsiknakis, *A Semantic Infrastructure for the Integration of Bioinformatics Services*, International Conference on Intelligent Systems Design and Applications (ISDA 09), November 30- December 2 2009, Pisa, Italy.
  79. G. Tsiliki, M. Zervakis, M. Ioannou, M. Tsiknakis, D. Kafetzopoulos, *Multi-platform Data Integration in Microarray Analysis*, 9th International Conference on Information Technology and Applications in Biomedicine (ITAB 2009), Larnaca, Cyprus, November 5-7, 2009.
  80. S. Sfakianakis, L. Koumakis, G. Zacharioudakis, M. Tsiknakis, *Web-based Authoring and Secure Enactment of Bioinformatics Workflows*, 4th International Conference on Grid and Pervasive Computing (GPC 2009), Geneva, Switzerland, 4th - 8th May 2009, pp. 88-95, doi:10.1109/GPC.2009.14.
  81. M. Brochhausen, G. Weiler, L. Martin, C. Cocos, H. Stenzhorn, N. Graf, M. Doerr, M. Tsiknakis, B. Smith, *Applications of the ACGT Master Ontology on Cancer*, 4th International Workshop On Semantic Web & Web Semantics (SWWS '08), 9-14th November 2008, Monterrey, Mexico, In: R. Meersman, Z. Tari, P. Herrero (eds.): OTM 2008 Workshops, LNCS 5333, 1046-1055, 2008.
  82. A. Bucur, A. Persidis, D. Kafetzopoulos, M. Tsiknakis, L. Koumakis, V. Danilatou, *The need for integration of genomic information in a future EHR: An ACGT case study*. In proceedings of the 9th International HL7 Interoperability Conference (IHIC 2008), Heraklion, Crete, 8-11 October 2008.
  83. M. Zervakis, ME. Blazadonakis, A. Banti, D. Kafetzopoulos, V. Danilatou, M. Tsiknakis, *Performance Validation of Microarray Analysis Methods*. In proceedings of the 8th IEEE International Conference on Bioinformatics and BioEngineering (IEEE BIBE 2008), Athens, Greece, 8-10 October 2008.
  84. M. Kalaitzakis, V. Kritsotakis, P. Grangeat, C. Paulus, L. Gerfault, M. Perez, C. Reina, G. Potamias, M. Tsiknakis, D. Kafetzopoulos, *Proteomic Based Identification of Cancer Biomarkers: The LOCCANDIA Integrated Platform*. In proceedings of the 8th IEEE International Conference on Bioinformatics and BioEngineering (IEEE BIBE 2008), Athens, Greece, 8-10 October 2008.
  85. A. Analyti, E. Christodoulou, V. danilatou, M. Iannou, D. Kafetzopoulos, M. Kafousi, A. Kanterakis, H. Kondylakis, L. Koumakis, D. Manakanatas, T. Margaritis, G. Papaginnakis, G. Potamias, E. Sanidas, E. Stathopoulos, D. Tsiftis, M. Tsiknakis, G. Tsiliki, S. Vassilaros, *A new gene expression signature related to breast cancer estrogen receptor status*. In proceedings of the 8th IEEE International Conference on Bioinformatics and BioEngineering (IEEE BIBE 2008), Athens, Greece, 8-10 October 2008.
  86. A. Anguita, L. Martín, J. Crespo, M Tsiknakis, *An Ontology Based Method to Solve Query Identifier Heterogeneity in Post-Genomic Clinical Trials*, Proceedings of MIE2008 – The XX1st International Congress of the European, Federation for Medical Informatics, Studies in Health Technology and Informatics, Volume 136, pp 3-8, 2008, S. K. Andersen, et al (Eds), IOS Press, 2008.
  87. M. Brochhausen, G. Weiler, C. Cocos, H. Stenzhorn, N. Graf, M. Döerr, M. Tsiknakis, *The ACGT Master Ontology on Cancer – a New Terminology Source for Oncological Practice*. In proceedings of the 21th IEEE International Symposium on Computer-Based Medical Systems (CBMS 2008), IEEE Computer Society, pp. 324-329, Jyväskylä, June 17-19, 2008, Finland.
  88. M. Kalaitzakis, V. Kritsotakis, C. Kondylakis, G. Potamias, M. Tsiknakis, D. Kafetzopoulos, *An Integrated Clinico-Proteomics Information Management and Analysis Platform*. In proceedings of the 21th IEEE International Symposium on Computer-Based Medical Systems (CBMS 2008), IEEE Computer Society, pp. 218-321, Jyväskylä, June 17-19, 2008, Finland.
  89. L. Martín, A. Anguita, V. Maojo, E. Bonsma, A. Bucur, J. Vrijnsen, M. Brochhausen, C. Cocos, H. Stenzhorn, M. Tsiknakis, M. Doerr, H. Kondylakis, *Ontology based integration of distributed and heterogeneous data sources in ACGT*. In proceedings of the International

- Conference on Health Informatics (HEALTHINF 2008), 28-31 January 2008, Madeira, Portugal.
90. M. Tsiknakis, S. Sfakianakis, S. Rueping, O. Trelles, S. Castille, T. Sengstag, V. Virvillis, *A semantic grid services architecture in support of efficient knowledge discovery from multilevel clinical and genomic datasets*. In proceedings of the International Conference on Health Informatics 2008 (HEALTHINF 2008), 28-31 January 2008, Madeira, Portugal.
  91. L. Martín, E. Bonsma, A. Anguita, J. Vrijnsen, M. Garcia-Remesal, J. Crespo, M. Tsiknakis, V. Maojo, *Data Access and Management in ACGT: Tools to solve syntactic and semantic heterogeneities between clinical and image databases*. In proceedings of the first International Workshop on Conceptual Modelling for Life Sciences Applications (CMLSA 2007), Auckland, New Zealand, Nov. 2007. Hainaut et al. (Eds.): ER Workshops 2007, LNCS 4802, pp. 24–33, 2007., Springer-Verlag Berlin Heidelberg 2007
  92. G. Potamias, L. Koumakis, A. Kanterakis, S.Sfakianakis, A.Analyti, V. Moustakis, D. Kafetzopoulos, S. Ruping, M. Tsiknakis, *Knowledge Discovery Scientific Workflows for Clinico-Genomics Research*. In proceedings of the 19th IEEE International Conference on Tools with Artificial Intelligence (ICTAI 07), October 29-31, Patras, Greece.
  93. G. Potamias, L. Koumakis, A. Kanterakis, V. Moustakis, D. Kafetzopoulos, M. Tsiknakis, *Mining Interesting Clinico-Genomic Associations: The HealthObs Approach*. In proceedings of the 4th IFIP Conference on Artificial Intelligence Applications & Innovations (AIAI2007), September 19-21, 2007, Athens, Greece.
  94. M. Tsiknakis, P. Grangeat, et al., *Functional specifications of an integrated proteomics information management and analysis platform*. In proceedings of the IEEE Engineering in Medicine and Biology Conference (EMBC 2007), Lyon, Aug. 2007.
  95. GS. Stamatakos, D. Dionysiou, N. Graf, N. Sofra, C. Desmedt, A. Hoppe, N. Uzunoglu, M. Tsiknakis, *The “Oncosimulator”: a multilevel, clinically oriented simulation system of tumor growth and organism response to therapeutic schemes: towards the clinical evaluation of in silico oncology*. In proceedings of the IEEE Engineering in Medicine and Biology Conference (EMBC 2007), Lyon, Aug. 2007.
  96. CE Chronaki, V Kontoyiannis, M Mytaras, N Aggourakis, S Kostomanolakis, T Roumeliotaki, G Kavlentakis, F Chiarugi, M Tsiknakis, *Evaluation of Shared EHR Services in Primary Healthcare Centers and their Rural Community Offices: the Twister Story*. In proceedings of the IEEE Engineering in Medicine and Biology Conference (EMBC 2007), Lyon, Aug. 2007.
  97. S. Ruping, S. Sfakianakis, M. Tsiknakis, *Extending Workflow Management for Knowledge Discovery in Clinico-Genomic Data*, Stud Health Technol Inform. 2007; 126:184-193.
  98. M Tsiknakis, S Sfakianakis, G Potamias, G Zacharioudakis, D. Kafetzopoulos, *A semantic grid infrastructure enabling integrated access and knowledge discovery from multilevel data in post-genomic clinical trials*. In proceedings. of the 15<sup>th</sup> International Workshops on Conceptual Structures, Babak Akhgar (ed.), ISBN 978-1-84628-990-3, Springer, July, 2007, Sheffield, UK.
  99. M. Tsiknakis, D. Kafetzopoulos, G. Potamias, A. Analyti, K. Marias, S. Sfakianakis, *Developing a European Biomedical GRID for post-genomic research on Cancer*. In proceedings of the IEEE Information Technology and Applications in Biomedicine Conference (IEEE – ITAB), 26-28 Oct 2006, Ioannina, Greece.
  100. JC. Sarivougioukas, M. Tsiknakis, A. Th. Vagelatos, D. I. Fotiadis, *Ubiquitous Computing Infrastructure with a Container Active Map and a Naming System serving the Home Care environments*. In proceedings of the IEEE Information Technology and Applications in Biomedicine Conference (IEEE – ITAB), 26-28 Oct 2006, Ioannina, Greece.
  101. F. Chiarugi, G. Zacharioudakis, M. Tsiknakis, J. Thestrup, K. M. Hansen, P. Antolin, J. Camara Melgosa, P. Rosengren and J. Meadows, *Ambient Intelligence Support for Tomorrow’s Health Care: Scenario Based Requirements and Architectural Specifications of the eu-DOMAIN Platform*. In proceedings of the IEEE Information Technology and Applications in Biomedicine Conference (IEEE – ITAB), 26-28 Oct 2006, Ioannina, Greece.

102. F. Chiarugi, M. Tsiknakis, D. Conforti, V. Lagani, F. Perticone, G. Parati, K. Kawecka-Jaszcz, A. Marsh, M. Stratakis, S. Di Bona, R. Fontanelli, D. Guerri, O. Salvetti, D. Gamberger, and M. Valentini, *Support for the Medical-Clinical Management of Heart Failure within Elderly Population: the HEARTFAID Platform*. In proceedings of the IEEE Information Technology and Applications in Biomedicine Conference (IEEE – ITAB), 26-28 Oct 2006, Ioannina, Greece.
103. A. Kouroubali, V. Sakkalis, C. Chronaki, M. Tsiknakis, *eChallenges in the Implementation of eHealth Services over a Hybrid Network Architecture*. In proceedings of the eChallenges 06 Conference, October 2006, Barcelona, Spain, Also in: *Exploiting the Knowledge Economy: Issues, Applications, Case Studies*, Paul Cunningham and Miriam Cunningham (Eds), IOS Press 2006, ISBN: 1-58603-682-3.
104. G. Potamias, M. Tsiknakis, V. Paputsidis, A. Kanterakis, K. Marias, D. Kafetzopoulos, *Advancing Clinico-Genomic Research Trials via Integrated Knowledge Discovery Operations*. In proceedings of the Medical Informatics in Europe (MIE 2006) International Congress (<http://www.mie2006.org/>), 27-30 August 2006, Maastricht, Netherlands.
105. M. Tsiknakis, D. Kafetzopoulos, G. Potamias, C. Marias, A. Analyti, A. Manganas, *Building a European Biomedical Grid on Cancer: The ACGT Integrated Project*. In proceedings of the HealthGRID 06 Conference, 6-8 June 2006, Valencia, Spain. Also in *Stud. Health Technol. Inform.*, 2006, 120:247-58.
106. M. Spanakis, P. Lelis, F. Chiarugi, C. Chornaki, M. Tsiknakis, *R&D challenges in developing an ambient intelligence eHealth platform*. In proceedings of the 3rd European Medical and Biological Engineering Conference (EMBEC'05), volume 11, pp. 1727-1983, November 20-25, 2005, Prague, Czech Republic.
107. N. Stathiakis, D. G. Katehakis, C. Chronaki, and M. Tsiknakis, *Security Risk Management in Electronic Health Record Systems*. In proceedings of the 21st Annual Conference & Exhibition Towards an Electronic Patient Record (TEPR) 2005, Salt Lake City, United States, May 16-18, 2005.
108. K. Marias, M.G. Linguraru, M.A. Gonzalez Ballester, S. Petroudi, M. Tsiknakis and J.M. Brady, *Automatic Labelling and BI-RADS Characterisation of Mammogram Densities*. In proceedings of 27th IEEE Engineering in Medicine and Biology Society (EMBS) Annual International Conference, IEEE, Shanghai, China, September, 2005.
109. A. Kouroubali, D. Vourvahakis and M. Tsiknakis, *Innovative Practices in the Emergency Medical Services in Crete*. In proceedings of the 10th International Symposium on Health Information Management Research (iSHIMR 2005), 22-24 Sept. 2005, Thessaloniki, Eds Bamidis, P.D., Bath, P., Eglestone, B., and Sotiriadou, A., SEERC, Greece, pp. 166-175.
110. G. Potamias, A. Analyti, D. Kafetzopoulos, M. Kafousi, T. Margaritis, D. Plexousakis, P. Poirazi, M. Reczko, I.G. Tollis, M.E. Sanidas, E. Stathopoulos, M. Tsiknakis, S. Vassilaros, *Breast Cancer and Biomedical Informatics: The PrognoChip Project*. In proceedings of the 17th IMACS World Congress on Scientific Computation, Applied Mathematics and Simulation Paris, France, 2005.
111. P. Lelis, C. Chronaki, M. Tsiknakis, S.C. Orphanoudakis, *Promoting the Engineering of adaptable eHealth services*, In proceedings of the 2nd International Conference on Information Communication Technologies in Health, (ICICTH 2004), Samos, Greece, July 8-10, 2004.
112. M. Tsiknakis, G. Potamias, D. Kafetzopoulos, *An Integrated Clinico-genomic computational Environment: Design and operational specifications*. In proceedings of the 2nd International Conference on Information Communication Technologies in Health, (ICICTH 2004), Samos, Greece, July 8-10, 2004, pp. 21-26.
113. T. Z. Tzelepis, M. Tsiknakis, D. G. Katehakis and S.C. Orphanoudakis, *Design and Implementation of "Two-level" Clinical Information Systems based on Archetypes*. In Proceedings of the 2nd International Conference on Information Communication Technologies in Health (ICICTH 2004), Samos, Greece, July 8-10, 2004, pp. 101-106.

114. A. Manganas, M. Tsiknakis, E. Leisch, L. Karefilaki, K. Monsieurs, LL. Bossaert, F. Giorgini, *JUST in time health emergency interventions: an innovative approach to training the citizen for emergency situations using virtual reality techniques and advanced IT tools (the Web-CD)*, *Stud Health Technol Inform.* 2004;103:315-26.
115. A. Manganas, M. Tsiknakis, E. Leisch, M. Ponder, T. Molet, B. Herbelin, N. Magnetat-Thalman, D. Thalman, M. Fato, A. Schenone, *JUST in time health emergency interventions: an innovative approach to training the citizen for emergency situations using virtual reality techniques and advanced IT tools (The VR tool)*. *Stud Health Technol Inform.* 2004;103:327-37
116. M. Tsiknakis, D.G. Katehakis and S.C. Orphanoudakis, *A Health Information Infrastructure Enabling Secure Access to the Life-long Multimedia Electronic Health Record*. In proceedings of the 18th International Congress and Exhibition in Computer Assisted Radiology and Surgery (CARS 2004), Chicago, Illinois, USA, June 23-26, 2004, pp. 289-294.
117. CE Chronaki, P. Lelis, F. Chiarugi, D. Trypakis, K. Moumouris, H. Stavarakis, G. Kavlentakis, N. Stathiakis, M. Tsiknakis and S.C. Orphanoudakis, *An open ehealth platform for health management using adaptable service profiles*. In proceedings of the 18th International Congress and Exhibition in Computer Assisted Radiology and Surgery (CARS 2004), Chicago, Illinois, USA, June 23-26, 2004, pp. 456-461.
118. V. Sakkalis, F. Chiarugi, S. Kostomanolakis, C. Chronaki, M. Tsiknakis, SC. Orphanoudakis, *A Gateway between the SCP-ECG and the DICOM 3.0 Supplement 30 Waveform Standards*. In proceedings of the IEEE Computers in Cardiology 2003 (CIC'2003) Conference, 21-24 September 2003, Chalkidiki, Greece, 30:25-28.
119. C. Chronaki, F. Chiarugi, E. Mavrogiannaki, C. Demou, P. Lelis, D. Trypakis, M. Spanakis, M. Tsiknakis, SC. Orphanoudakis, *An eHealth Platform for Instant Interaction among Health Professionals*. In proceedings of the IEEE Computers in Cardiology 2003 (CIC'2003) Conference, 21-24 September 2003, Chalkidiki, Greece, 30:101-104.
120. N. Stathiakis, C. Chronaki, E. Skipenes, E. Henriksen, E. Charalambous, A. Sykianakis, G. Vrouchos, N. Antonakis, M. Tsiknakis, SC. Orphanoudakis, *Risk Assessment of a Cardiology eHealth Service in HYGEIAnet*. In proceedings of the IEEE Computers in Cardiology 2003 (CIC'2003) Conference, 21-24 September 2003, Chalkidiki, Greece, 30:201-204.
121. F. Chiarugi, M. Spanakis, PJ. Lees, C. Chronaki, M. Tsiknakis, and SC. Orphanoudakis, *ECG in Your Hands: A Multi-Vendor ECG Viewer for Personal Digital Assistants*. In proceedings of the IEEE Computers in Cardiology 2003 (CIC'2003) Conference, 21-24 September 2003, Chalkidiki, Greece, 30:359-62. .
122. F. Chiarugi, D. Trypakis, V. Kontogiannis, PJ. Lees, C. Chronaki, M. Zeaki, N. Giannakoudakis, D. Vourvahakis, M. Tsiknakis, SC. Orphanoudakis, *Continuous ECG Monitoring in the Management of Pre-Hospital Health Emergencies*. In proceedings of the IEEE Computers in Cardiology 2003 (CIC'2003) Conference, 21-24 September 2003, Chalkidiki, Greece, 30:205-208.
123. S.C. Orphanoudakis, M. Tsiknakis, D. Anthoulakis, and C. Stephanidis, *The integrated Electronic Health Record: Accessibility, Usability and Security Issues*. In proceedings of the 10<sup>th</sup> International Conference on Human-Computer Interaction (HCI 2003), Heraklion, Crete, July 10-15, 2003, Vol. 4, pp. 1168-1172.
124. G. Potamias, L. Koumakis, G. Charissis, V. Moustakis, M. Tsiknakis, and S.C. Orphanoudakis, *Supporting Population Centered Medical Decision Making: Design Recommendations and Preliminary Assessment*. In proceedings. of the 10<sup>th</sup> International Conference on Human-Computer Interaction (HCI 2003), Heraklion, Crete, July 10-15, 2003, Vol. 4, pp 795-799.
125. M. Tsiknakis, *A Component-based Information Infrastructure for Regional Health Information Networks and its relevance to GRID*. In proceedings of the international HealthGRID 03 Conference, Lyon, France, January 16-17 2003. Available at <http://lyon2003.healthgrid.org/program.php>

126. D. Katehakis, S. Kostomanolakis, M. Tsiknakis and SC. Orphanoudakis, *Image Management in an Integrated Electronic Health Record Environment*. In proceedings of EuroPACS 2002, 20th International Conference, Oulou, Finland, September 5-7, 2002, pp. 87-92.
127. C. Chronaki, PJ. Lees, F. Chiarugi, E. Leisch, M. Tsiknakis and SC. Orphanoudakis, *Towards an Integrated Cardiology Information System*. In proceedings of TEPR 2002, Toward an Electronic Patient Record Conference, Seattle, Washington, USA, May 2002.
128. F. Chiarugi, M. Spanakis, PJ. Lees, C. Chronaki, M. Tsiknakis, A. Traganitis and SC. Orphanoudakis, *Real-Time Cardiac Monitoring Over A Regional Health Network: Preliminary Results From Initial Field Testing*. In proceedings of the 29th Annual Computers In Cardiology Congress, Memphis, USA, 22-25 September 2002, pp 347-350.
129. A. Traganitis, D. Trypakis, M. Spanakis, S. Condos, T. Stamkopoulos, M. Tsiknakis, and SC. Orphanoudakis, *Home monitoring and personal health management services in a regional health telematics network*. In proceedings of EMBC 2001, 23rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Istanbul, 25-28 Oct. 2001.
130. D. Katehakis, M. Tsiknakis, and SC. Orphanoudakis, *An Architecture for Integrated Regional Health Telematics Networks*. In proceedings of EMBC 2001, 23rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society, "Building New Bridges at the Frontiers of Engineering and Medicine", Istanbul, 25-28 October 2001.
131. C. Chronaki, P. Lelis, C. Demou, M. Tsiknakis, and SC. Orphanoudakis, *An HL7/CDA framework for the design and deployment of telemedicine Services*. In proceedings of EMBC 2001, 23rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Istanbul, 25-28 Oct. 2001.
132. D. Katehakis, S. Sfakianakis, M. Tsiknakis, and SC. Orphanoudakis, *Fundamental Components for the Realization of a Federated Integrated Electronic Health Record Environment*. In proceedings of EMBC 2001, 23rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Istanbul, 25-28 October 2001 vol. 4, pp. 3646- 3649.
133. C. Chronaki, PJ. Lees, N. Antonakis, F. Chiarugi, G. Vrouchos, G. Nikolaidis, M. Tsiknakis, and SC. Orphanoudakis, *Preliminary Results From The Deployment Of Integrated Teleconsultation Services In Rural Crete*. In proceedings of the IEEE Computers in Cardiology, Rotterdam, pp. 671-674, Sept 21-25 2001.
134. PJ. Lees, F. Chiarugi, D. Lombardi, C. Chronaki, M. Tsiknakis, and SC. Orphanoudakis, *Simulator of Patient Traffic in a Cardiology Department for Testing the Integration of an ECG Management System with an Existing Clinical Database*. In proceedings of Computers in Cardiology 2001, Rotterdam, 21-25 Sept 2001.
135. F. Chiarugi, PJ. Lees, C. Chronaki, M. Tsiknakis, and SC. Orphanoudakis, *Developing Manufacturer-Independent components for ECG viewing and for data exchange with ECG devices: Can The SCP-ECG standard help?* In proceedings of Computers in Cardiology 2001, Rotterdam, Sept 21-25 2001.
136. D. Katehakis, S. Kostomanolakis, M. Tsiknakis, and SC. Orphanoudakis, *An Open, Component-based Information Infrastructure to Support Integrated Regional Healthcare Networks*. In: V. Patel, R. Rogers, R. Haux (Eds.) MEDINFO 2001, Proceedings of the Tenth World Congress on Health and Medical Informatics, London, UK, IOS Press, Amsterdam, September 2-5, 2001, pp. 18-22.
137. M. Tsiknakis, C.E. Chronaki, S. Kostomanolakis, and S.C. Orphanoudakis, *Teleradiology Services within the Context of an Integrated Regional Network*. In proceedings of Computer Assisted Radiology and Surgery 2001 (CARS 2001), 27-30 June 2001, Berlin, Germany.
138. D. Katehakis, M. Tsiknakis, and SC. Orphanoudakis, *Enabling Components of HYGEIAnet*. In proceedings of TEPR 2001, Your Connection to Electronic Healthcare, Boston, MA, May 8-13, 2001, pp. 146-153.

139. D.G. Katehakis, M. Tsiknakis, SC. Orphanoudakis, *Information Society Technologies in Healthcare*. In proceedings of the 27th Conference on Current Trends in Theory and Practice of Informatics (SOFSEM 2000), Milovy, Czech Republic, November/December 2000, V. Havlac, K. G. Jeffery, and J. Wiedermann (editors), Lecture Notes in Computer Science (LNCS), Vol. 1963, Springer-Verlag, 2000, pp. 152-172. (<http://dblp.uni-trier.de/db/conf/sofsem/sofsem2000.html>)
140. D. Katehakis, P. Lelis, E. Karabela, M. tsiknakis, SC Orphanoudakis, *An environment for the creation of an integrated electronic health record in Hygeianet, the regional health telematics network of Crete*. In proceedings of TEPR 2000, Toward an Electronic Patient Record Conference, Seattle, Washington, USA, May 2002, pp. 89-98.
141. M. Tsiknakis, D. Katehakis, and SC. Orphanoudakis, *Information Infrastructure for an Integrated Health Services Network*. In proceedings of the IEEE EMBS 3<sup>rd</sup> International Conference on Information Technology Applications in Biomedicine, Arlington, Virginia, USA, Nov. 2000, pp. 278-283.
142. G. Potamias, M. Tsiknakis, D. Katehakis, E. Karabela, V. Moustakis, and SC Orphanoudakis, *Role-based access to patient's clinical data: the InterCare approach in the region of Crete*. In Proceedings of MIE 2000 and GMDS 2000, Medical Infobahn for Europe (Editors A. Hasman, B. Blobel, J. Dudeck, R. Engelbrecht, G. Gell, H.-U. Prokosch), IOS Press, Hannover, Germany, August 27- September 1, 2000. Also in Stud Health Technol Inform. 2000; vol. 77, pp. 1074-1079.
143. N. Sarannumi, M. Tsiknakis, and K. Bernstein, *Professionals and Citizens Network for Integrated Care*. In proceedings of the EMBC 2000, 22<sup>nd</sup> Annual International Conference of the IEEE Engineering in Medicine and Biology Society, June 2000, Chicago, USA.
144. D. Katehakis, P. Lelis, E. Karabela, M. Tsiknakis, and SC. Orphanoudakis, *An environment for the creation of an Integrated Electronic Health record in HYGEIAnet, the Regional Health Telematics Network in Crete*. In proceedings of the 16<sup>th</sup> Annual Towards an Electronic Patient Record (TEPR 2000) Conference, San Francisco, California, USA, May 2000, Vol. 1, pp. 89-98.
145. K. Hristofis, G. Potamias, M. Tsiknakis, V. Moustakis, SC. Orphanoudakis, *Mining Distributed and Heterogeneous Data Sources: A Project in the Medical Domain*. In proceedings of Machine Learning in the New Information Age, European Conference of Machine Learning (ECML2000), Barcelona, Spain, Oct 2000, pp. 27-38.
146. DG Katehakis, S Kostomanolakis, M Tsiknakis, SC Orphanoudakis, *Evaluating Alternative Approaches for Integrating Clinical Information Systems: Messaging" vs. federating*, In proceedings of the TEHRE 2000 Conference, London, UK, Nov. 2000.
147. S. Kostomanolakis, G. Kavlentakis, V. Sakkalis, C. E. Chronaki, M. Tsiknakis, S. C. Orphanoudakis, *Seamless Integration of Healthcare Processes related to Image Management and Communication in Primary Healthcare Centers*. In "From PACS to Internet/Intranet, Information Systems, Multimedia & Telemedicine", Proceedings of the EuroPACS 2000 Conference, Gratz, Austria 20-22 September 2000, G. Gell, A. Holzinger, M. Wiltgen (eds.), vol. 144, pp. 126-132
148. P.J. Lees, C.E. Chronaki, F. Chiarugi, E. Tsiknakis, S.C. Orphanoudakis, *Interconnectivity of Cardiology Patient Databases using Internet Technology*. In Proceedings of the 27th IEEE Annual Conference of Computers in Cardiology, Cambridge, Massachusetts, 24-27 September 2000, 27: 667-670.
149. C. Chronaki, S. Kostomanolakis, P. Lelis, P.J. Lees, F. Chiarugi, M. Tsiknakis, SC Orphanoudakis, *Integrated teleconsultation services in cardiology*. In Proceedings of the 27th IEEE Annual Conference of Computers in Cardiology, Cambridge, Massachusetts, 24-27 September 2000, 27:175-178
150. M. Tsiknakis, and D. Katehakis, *Virtual EHCR Services over HYGEIAnet: The Patient Clinical Data Directory*. In Proceedings of Towards an Electronic Health Record Europe (TEHRE'99), Meet the Challenges of Health IT, London, UK, November 15, 1999.

151. C. E. Chronaki, X. Zabulis, D.G. Katehakis, A. Giannopoulos, N. Stathiakis, M. Tsiknakis, P.J. Lees, E.N. Simantirakis, P.E. Vardas, and S.C. Orphanoudakis, *WebOnCOLL-enabled Remote Cardiology Consultation for Suspected Myocardial Infarction*. In Proceedings of 3<sup>rd</sup> World Congress on the Internet in Medicine (Mednet'98), London, England, 16-19 November 1998, pages 41-43.
152. SC. Orphanoudakis, M. Tsiknakis, Integrated Regional Health Information Networks. In Proceedings of 3<sup>rd</sup> World Congress on the Internet in Medicine (Mednet'98), London, England, 16-19 November 1998, pages 41-43.
153. D. Katehakis, M. Tsiknakis, A. Armaganidis, and SC. Orphanoudakis, *Functional and Control Integration of an ICU, LIS, and PACS Information System*. In Proceedings of MIE'97, Porto Carras, Greece, May 25-29, 1997, pp. 15-19. Also in Stud Health Technol Inform 1997, pp. 15-19.
154. E. Leisch, M. Tsiknakis, and SC. Orphanoudakis, *Pre-Hospital Health Emergency Management as an Integrated Service of the Regional Health Telematics Network of Crete*. In Proceedings of Medical Informatics in Europe 97 (MIE'97) Conference, Porto Carras, Greece, May 25-29, 1997, pp. 33-37. Also in Stud Health Technol Inform 1997, pp. 33-37.
155. C. Chronaki, X. Zabulis, N. Stathiakis, Leisch E, Katehakis D, M. Tsiknakis, and SC. Orphanoudakis, *A Web-based Environment for Medical Collaboration in a Regional Healthcare Network*. In proceedings of Computer Assisted Radiology 97 (CAR'97) international conference, Springer-Verlag, Berlin, June 25-28, 1997, pp. 656-661.
156. C. Chronaki, M. Tsiknakis, and SC. Orphanoudakis, *Virtual Workspaces in P<sup>2</sup>Cnet*. In Proceedings of the 1<sup>st</sup> World Congress on the Internet in Medicine (MEDNET'96), Brighton, UK, October 14-17, 1996, pp. 89-91.
157. E. Leisch, M. Tsiknakis, and SC. Orphanoudakis, *An Architectural Framework for the Integration of Geographically Distributed Heterogeneous Autonomous Medical Information Systems*. In Proceedings of EuroPACS'96, Heraklion, Crete, Greece, October 3-5, 1996, pp. 73-77.
158. SC. Orphanoudakis, M. Tsiknakis, C. Chronaki, S. Kostomanolakis, M. Zikos, and Y. Tsamardinou, *Development of an Integrated Image Management and Communication System on Crete*. In proceedings of the Computer Assisted Radiology 95 (CAR'95) International Conference, Springer-Verlag, Berlin, June 21-24, 1995, pp. 481-487.
159. M. Tsiknakis, Expert Systems Applied to instrument Condition Monitoring, International Conference in Intelligent Measurement of Electrical and Magnetic Quantities, Varna, Bulgaria, Nov. 1990.
160. M. Tsiknakis, Design of a novel, intelligent Electromagnetic Flowmeter, International Conference on Robotics and Automation, Athens, Greece, 1987.

## Papers in Proceedings of International Conferences (extended abstract reviewed)

1. G. Giannakakis, P. Vorgia, S. Voutoufianakis, M. Pediaditis, D. Champsas, M. Tsiknakis, Low frequency preictal EEG waves preceding epileptic seizures originating from roght frontal lobe, The 31st International Epilepsy Congress (IEC), Istanbul, Turkey, 5th - 9th September, 2015.
1. A. Irrthum, L. Pugliano, M. Maetens, A. Bucur, J. van Leeuwen, B. Claerhout, K. De Scheppe, G.C. Manikis, K. Marias, M. Tsiknakis, D. Perez-Rey, R. Alonso-Calvo, S. Paraiso, K.V.S. Saini, P. Dinh, M.J. Piccart-Gebhart, INTEGRATE- An innovative and collaborative cancer research system, American Society of Clinical Oncology Annual Meeting (ASCO 2013), Chicago, US, May 31 – June 4, 2013.
2. N. Graf, A. Anguita, M. Tsiknakis, et al, p-medicine: a solution for translational research?, 44rd Congress of the International Society of Paediatric Oncology (SIOP), London, OK, Oct 2012.

3. N. Graf, M. Tsiknakis, M. Góralczyk, N. McGuinness, G. Verhenneman, B. Claerhout, Y. Braun, N Forgo, Legal, ethical and clinical handling of consent in European projects dealing with vulnerable patient groups, 43rd Congress of the International Society of Paediatric Oncology (SIOP), Auckland, Australia, Oct 2011.
4. N. Graf, T. Sengstag, F. Schera, L. Martin, B. Claerhout, H. Stenzhorn, N. Nourkami, M. Gessler, M. Tsiknakis, Advanced Wilms Tumour Scenario using the ACGT environment, 7th International Meeting on the Biology of Childhood renal tumours, London, UK, 2010.
5. P. Grangeat, L. Gerfault, C. Paulus, V. Kritsotakis, M. Tsiknakis, F. Lisacek, PA. Binz, M. Perez, M. Trauchessec, V. Brun, *First demonstration on NSE biomarker of a computational environment dedicated to lab-on-chip based cancer diagnosis*, 58th ASMS Conference on Mass Spectrometry and Allied Topics, May 23 - 27, 2010 Salt Lake City, Utah (poster presentation).
6. C. Desmedt, N. Graf, N. Forgo, B. Claerhout, A. Bucur, G. Stamatakos, J. Pukacki, T. Sengstag, S. Rüping, M. Tsiknakis, *ACGT: A platform to facilitate clinico-genomic research on breast cancer*, IMPAKT Breast Cancer Conference, Brussels, Belgium 7-9 May 2009.
7. M. Perez-Perez, B. Jordán, E. M Brunet-Errard, R. Ossig, M. Tsiknakis, J. Schneckeburger, P. Grangeat, *LOCCANDIA: Lab-on-chip based protein profiling for Cancer Diagnosis*, International Workshop on wearable Micro and Nanosystems for Personalised Health (pHealth 2008), Valencia, Spain, 21-23 May 2008.
8. N. Graf, G. Weiler, M. Brochhausen, F. Scherer, A. Hoppe, M. Tsiknakis, S. Kiefer, *The importance of an ontology based clinical data management system (OCDMS) for clinico-genomic trials in ACGT (Advancing Clinico-Genomic Trials on Cancer)*. In proceedings of the International Society of Paediatric Oncology Conference 2007, 1-3 November 2007, Mumbai, India.
9. L. Martín, A. Anguita, G. de la Calle, M. García-Remesal, J. Crespo, M. Tsiknakis, V. Maojo, *Semantic Data Integration in the European ACGT Project*. In proceedings of the American Medical Informatics Association (AMIA) Annual Symposium, 11-14 Nov 2007, Chicago, IL (USA).
10. P. Grangeat, M. Tsiknakis, et al., *Lab-On-Chip based protein profiling for Cancer Diagnosis*, Nanobio-Europe 2007. International Congress on BioNanotechnology, June 13-15, 2007, Münster, Germany (poster presentation).
11. N. Graf, A. Hoppe, C. Desmedt, G. Stamatakos, M. Brochhausen, G. Weiler, N. Förgo, Y. Tanaka, M. Tsiknakis, *Post-genomic Clinical Trials: Needs and Requirements*, ACGT Workshop, EGEE conference, Budapest, 4th October 2007 (<http://indico.cern.ch/getFile.py/access?contribId=242&sessionId=78&resId=1&materialId=slides&confId=18714>)
12. G. Potamias, M. Tsiknakis, D. Kafetzopoulos, M Perez, P-A Binz, F Lisacek, V Kritsotakis, D Manakanatas, H Kondylakis, and P Grangeat, *The LOCCANDIA Integrated Clino-Proteomics Environment*. In proceedings of the 5th International Conference on Instrumental Methods of Analysis, Modern Trends and Applications, 30 Sept – 4 Oct, Patras, Greece.
13. N. Graf, C. Desmedt, A. Hoppe, M. Tsiknakis, N. Sofra, G. Stamatakos, *Clinical requirements of "In Silico Oncology"*. In proceedings of the 14th European Cancer Conference, 23rd -27th September 2007, Barcelona.
14. A. Anguita, L. Martín, J. Crespo, M. Tsiknakis, V. Maojo, *Solving semantic heterogeneities and integration between clinical and image databases in post-genomic clinical trials*. In proceedings of the Personalised Healthcare (phealth2007) International Conference (sponsored by the IEEE Engineering in Medicine and Biology Society (EMBS)), June 2007, Chalkidiki, Greece.
15. M. Tsiknakis, D. Potamias, M Klapa, D. Kafetzopoulos, *Architectural foundations of a semantic grid infrastructure enabling seamless integration and knowledge discovery from multilevel biomedical data*. In proceedings of the Foundations of Systems Biology in

- Engineering 2007 (FOSBE 2007) Conference, Stuttgart, Germany, September 9 - 12, 2007 (poster presentation).
16. M. Tsiknakis, *Fighting cancer: the role of Information technologies*, Bio-Med-Grid Workshop, Poznan, Poland, 25 April 2007.
  17. G. Potamias, M. Tsiknakis, D. Kafetzopoulos, *Cancer, Clinico-Genomics and Biomedical Informatics: The ACGT Integrated Environment*, International Symposium on Biomedical Informatics in Europe, June 2007, Barcelona.
  18. D. Kafetzopoulos, G. Potamias, M. Tsiknakis, *Protein Profiling and Diagnosis with Advanced Lab-on-Chip and Proteomics Technology: The LOCCANDIA Approach*, International Symposium on Biomedical Informatics in Europe, June 2007, Barcelona.
  19. S. Sfakianakis, C. E. Chronaki, I. Bernstein, J. R. Norgaard, D. G. Katehakis, G. Potamias, M. Tsiknakis, *Early experience from HL7 v3 tools, the Pedigree topic, and CDA in the Danish HNPPC Registry*. In proceedings of the International HL7 Interoperability Conference IHIC 2006, August 24-25, 2006, Cologne, Germany.
  20. D. Vourvahakis, A. Kouroubali, CE. Chronaki, M. Tsiknakis, *Fast track option for medical training using DVB-RCS in Prehospital Emergency Medicine in the island of Crete: a user-centered approach*, 1st Healthcare Workshop organised in the context of the International Educational and Networking Forum for eHealth, Telemedicine and Health ICT (Med-e-tel 2006) conference, Luxemburg, 6 April 2006.
  21. M. Tsiknakis, *Requirements and architectural specifications of a European Biomedical Grid: The ACGT Integrated Project*, Annual Conference of the Cancer Biomedical Informatics Grid (caBIG), April 2006, Washington.
  22. D. Kafetzopoulos, S. Stathopoulos, E. Sanidas, S. Vassilaros, K. Marias, G. Potamias, M. Tsiknakis, *Biomedical informatics as the means for achieving 'systems biology' approaches to understanding and curing cancer*. (2005). HERCMA 2005 (Hellenic European Research in Computer Mathematics and its Applications) Conference, September 22-24, 2005, Athens, Greece (Abstract + Presentation).
  23. M. Tsiknakis, *The HYGEIAnet experiences on adoption of innovations and change management*. In proceedings of the eHealth 2005 Conference - "Transforming Health Service Organisations in the e-Health Area", 1-3 June 2005, Athens. Abstract available at: <http://www.futurehealth.fi/main.asp?scat=534&art=2358>
  24. G. Potamias, A. Analyti, D. Kafetzopoulos, M. Tsiknakis, D. Plexousakis, P. Poirazi, M. Reczko, Y. Tollis, E. Stathopoulos, S. Vassilaros, *Breast cancer, microarrays and biomedical informatics: The Prognochip Project*, First International Advanced Research Workshop on In Silico Oncology: Advances and Challenges (1ST IARWISO), Sparta, Greece, Sept. 2004.
  25. CE. Chronaki, A. Triantafyllidis, M. Tsiknakis, S. C. Orphanoudakis, *CDA for Mobile Health: Meeting the Health Needs of Rural Communities in Twister*. In proceedings of the 2nd Int Conference on the Clinical Document Architecture (CDA), Acapulco, Mexico, 20-22 Oct. 2004.
  26. C.E. Chronaki, F. Chiarugi, P.J. Lees, E. Charalambus, A. Sykianakis, G. Vrouchos, N. Antonakis, G. Frantzeskakis, M. Tsiknakis, S.C. Orphanoudakis, *Digital ECG Databases in the Regional Health Information Network of Crete*. In proceedings of the XXX International Congress on Electrocardiology 2003 (ICE2003), 11-14 June 2003, Helsinki, Finland.
  27. M. Tsiknakis, P. Lelis, C.E. Chronaki, *Reporting Experiences from Using the HL7 Clinical Document Architecture in HYGEIAnet, the Regional Health Information Network of Crete*. In proceedings of the 1st CDA Conference, Berlin, Germany, 7-10 October 2002.
  28. CE. Chronaki, et al., *Teleconsultation for the clinical management of suspected cardiac patients in rural Crete: a HYGEIAnet project*, In Proceedings XXIII Congress of the European Society of Cardiology, Stockholm, September 1-5, 2001.
  29. F. Chiarugi, D. Lombardi, PJ. Lees, C. Chronaki, M. Tsiknakis, SC. Orphanoudakis, *Integration of an ECG management system with an existing cardiology information system to*

support daily ECG procedures in a cardiology department. In proceedings XXIII Congress of the European Society of Cardiology (ESC), Stockholm, Sep. 1-5, 2001.

30. G. Potamias, C. Cristofis, M. Tsiknakis, SC. Orphanoudakis, *Towards Internet-based Epidemiology: Integration of Distributed and Heterogeneous Clinical Data Sources*. In proceedings of the 5th World Congress on the Internet on Medicine (MEDNET2000), Brussels, Belgium, November 23-26, 2000. Also available in *Technology and Health Care, Volume 8, Issue 3-4 (2000)*, Special issue on abstracts of MEDNET 2000, the 5th world congress on the Internet in medicine, Brussels, 23-26 Nov. 2000, Pages: 211 – 212, 2000, ISSN:0928-7329
31. D. Katehakis, S. Sfakianakis, M. Tsiknakis, S. Orphanoudakis, *An infrastructure for integrated electronic health record services: the role of XML*. In Proceedings of the 5th World Congress on the Internet on Medicine (MEDNET2000), Brussels, Belgium, November 23-26, 2000. Also available in *Technology and Health Care, Volume 8, Issue 3-4 (2000)*, Special issue on abstracts of MEDNET 2000, the 5th world congress on the Internet in medicine, Brussels, 23-26 November 2000, pp. 189-190, 2000, ISSN:0928-7329.
32. C. Chronaki, P. Lelis, M. Tsiknakis, S.C. Orphanoudakis, *XML Technology in support of Clinical Protocols for Teleconsultation*. In Proc. of Mednet 2000, 22-24 November 2000, Brussels, Belgium. Also available in *Technology and Health Care, Volume 8, Issue 3-4 (2000)*, Special issue on abstracts of MEDNET 2000, the 5th world congress on the Internet in medicine, Brussels, 23-26 November 2000, pp. 285-286, 2000, ISSN:0928-7329.
33. C. Chronaki, S. Kostomanolakis, M. Tsiknakis, S.C. Orphanoudakis, *Advanced imaging services in a health-telematics network*. Poster Presentation in the ECR 2000/Compurad Exhibit, 5-10 March 2000, Vienna Austria. Abstract available at: <http://www.ecr.org/T/ECR00/sciprg/abs/p280017.htm>
34. S. Kostomanolakis, C. Chronaki, M. Tsiknakis, S.C. Orphanoudakis, *DicomGW: DICOM functionality as middleware*. Poster Presentation in the ECR 2000/Compurad Exhibit as part of the DICOM space activity, 5-10 March 2000, Vienna Austria, Abstract available at: <http://www.ecr.org/T/ECR00/sciprg/abs/p280017.htm>
35. S. Kostomanolakis, N. Stathiakis, F. Logothetidis, M. Tsiknakis, *Functional integration of HADS using DICOM and HL7*. In proceedings of the European Congress of Radiology (ECR) 2000, 5-10 March 2000, Vienna, Austria. Abstract available at: <http://www.ecr.org/T/ECR00/sciprg/abs/p280017.htm>
36. P.J. Lees, C. Chronaki, E.N. Simantirakis, M. Tsiknakis, SC. Orphanoudakis, PE. Vardas, *Remote Access to Medical Records via the Internet: Is it Feasible?*, In proceedings of the XXIst Congress of the European Society of Cardiology (ESC), Aug 28th - Sep. 1st 1999, Barcelona, Spain.
37. C. Chronaki, D. Katehakis, M. Tsiknakis, and SC. Orphanoudakis: *WebOnCOLL – An Open Platform Enabling Collaborative Information Sharing and its Application in Medicine*. In Proceedings of the Euro-Med Net '98 Conference, Nicosia, Cyprus, March 4-7, 1998.
38. M. Tsiknakis, C. Chronaki, S. Kostomanolakis, and SC. Orphanoudakis, *The Regional Health Telematics System of Crete*. In Proceedings of the Health Telematics '96 Conference, Naples, Italy, July 2-6, 1996, pp. 553-558.
39. M. Tsiknakis, C. Chronaki, M. Tsilimbaris, S. Panagopoulou, SC. Orphanoudakis, I. Pallikaris, *A Multimedia Integration Methodology through the Patient Meta-Record Concept in a Cornea Outpatient Clinic*. In proceedings of the ARVO'96 Conference, Fort Lauderdale, Florida, April 21-26, 1996.

## Edited and Co-authored Books

1. *Regional Health Economies and ICT Services*, Volume 115, Studies in Health Technology and Informatics, Edited by: N. Saranummi, D. Piggott, DG. Katehakis, M. Tsiknakis, K.

## Authored Chapters in Books and Encyclopaedias

1. H. Kondylakis, L. Koumakis, K. Mazzocco, M. Tsiknakis, and K. Marias, Participatory Aspects of ICT Infrastructures for Cancer Management, 2020, G. Pravettoni, S. Triberti (eds.), P5 eHealth: An Agenda for the Health Technologies of the Future, pp. 87 – 108, [https://doi.org/10.1007/978-3-030-27994-3\\_6](https://doi.org/10.1007/978-3-030-27994-3_6)
2. O. Simantiraki, G. Giannakakis, A. Pampouchidou, M. Tsiknakis, Stress detection from speech using spectral slope measurements, ICST Institute for Computer Sciences, SOcila Informatics and Telecommunications Engineering 2018, N. Oliver et al. (Eds): MindCare 2016/Fabulous 2016/IIoT 2015, LNICST 207, pp. 41-50, 2018, [https://doi.org/10.1007/978-3-319-74935-8\\_5](https://doi.org/10.1007/978-3-319-74935-8_5)
3. C. Chatzaki, M. Padiaditis, G. Vavoulas, M. Tsiknakis, *The MobiFall Dataset: Fall Detection and Classification with a Smartphone*, Artificial Intelligence: Concepts, Methodologies, Tools, and Applications, 2017, DOI: 10.4018/978-1-5225-1759-7.ch048
4. L. Koumakis, G.A. Potamias, M. Tsiknakis, M.E. Zervakis, V.A. Moustakis. Integrating Microarray Data and GRNs. Pietro Hiram Guzzi (Eds) Microarray Data Analysis, Second Edition. Methods in Molecular Biology (2014). Springer Protocols.
5. G. Giannakakis, V. Sakkalis, M. Padiaditis, M. Tsiknakis, *Methods for Seizure Detection and Prediction: An Overview*, *Neuromethods* 2014, Aug. 2014
6. E.G. Spanakis, V. Sakkalis, K. Marias, M. Tsiknakis, *Connection between Biomedical Telemetry and Telemedicine*, In Handbook of Biomedical Telemetry, First Edition, K. Nikita (Editor), John Wiley & sons, 2014.
7. H. Kondylakis, L. Koumakis, K. Marias, E. Genitsaridi, G. Pravettoni, A. Gorini, K. Mazzocco, M. Tsiknakis, Smart recommendation services in support of patient empowerment and personalized medicine, In G. A. Tsihrintzis et al (Eds), Multimedia Services in Intelligent Environments – Smart Innovation, Systems and Technologies, Springer International Publishing Switzerland 2013, Volume 25, 2013, pp 39-61, DOI: [10.1007/978-3-319-00375-7\\_4](https://doi.org/10.1007/978-3-319-00375-7_4)
8. M. Tsiknakis, Computational Infrastructures for Large-Scale Data Access and Analysis in Post-Genomic Clinical Trials, In A.S. Azmi (ed.), Systems Biology in Cancer Research and Drug Discovery, DOI 10.1007/978-94-007-4819-4\_16, Springer, 2012.
9. M. Tsiknakis, *Virtual community practices in e-Health*, In Virtual Communities of Practice and Social Interactive Technologies: Lifecycle and Workflow Analysis, D. Akoumianakis (Editor), IGI Global, 2009 DOI: 10.4018/978-1-60566-340-1, pp. 332-351.
10. I.N. Dimou, M.E. Zervakis, D. Lowe, M. Tsiknakis, Computational methods and tools for decision support in biomedicine: A critical overview, In Handbook of Research on Advanced Techniques in Diagnostic Imaging and Biomedical Applications, T.P. Exarchos, A. Papadopoulos, D.I. Fotiadis (Eds), Published by IGI Global (formerly Idea Group Inc.), 2009, Chapter 1, pp. Pages 1-17, DOI: 10.4018/978-1-60566-314-2.
11. M. Tsiknakis, *The HYGEIAnet experiences on adoption of innovations and change management*, In Network For Future Regional Health Care, Transforming Health Care Organisations, Zoi Kolitsi (Editor), Helsinki University Press, 2006, ISBN: 952-10-3494-7, pp. 31-46.
12. D.G. Katehakis and M. Tsiknakis, *Electronic Health Record (EHR)*, Encyclopaedia of Biomedical Engineering, Metin Akay (Editor), John Wiley & Sons, Inc., 2006, ISBN: 0-471-24967-X.
13. A. Kouroubali, V. Sakkalis, C. Chronaki, M. Tsiknakis, *eChallenges in the Implementation of eHealth Services Over a Hybrid Network Architecture: the case of eLearning*, In Exploiting

the Knowledge Economy: Issues, Applications, Case Studies, Paul Cunningham and Miriam Cunningham (Eds), IOS Press 2006, ISBN: 1-58603-682-3.

14. M. Tsiknakis, The HYGEIAnet experiences on adoption of innovations and change management. Network for Future Regional Health Care, Transforming Health Care Organisations. (pp. 31 - 46), Helsinki University Press, (ISBN 952-10-3494-7).
15. M. Tsiknakis, N. Saranummi, *Lessons learned from PICNIC*, In Regional Health Economies and ICT Services, Chapter 16, N. Saranummi, D. Piggott, D.G. Katehakis, M. Tsiknakis and K. Bernstein (Eds), 2005, ISBN: 1-58603-538-x, pp. 215-228.
16. M. Tsiknakis, A. Traganitis, M. Spanakis, SC Orphanoudakis, *Wireless Communication Technologies for Mobile Healthcare Applications: Experiences and Evaluation of Security related issues*, In "M-Health: Emerging Mobile Health Systems", Chapter 15, R. H. Istepanian, S. Laxminarayan, C. S. Pattichis (Eds), Kluwer Academic/Plenum Publishers, 2005.
17. A. Kouroubali, D.E Detmer, M. Tsiknakis, SC. Orphanoudakis, *Implementing Health Care Information Systems: Key Factors, Self-Organization and Take-Home Lessons*, In *Understanding Health Communications Technologies*, P. Whitten, D. Cook (Eds), Jossey-Bass, 2003, pp. 69-79, (ISBN 978-0-7879-7105-2).
18. SC. Orphanoudakis, C. Chronaki, M. Tsiknakis, and S. Kostomanolakis, *Telematics in Healthcare*, In *Biomedical Image Databases*, Chapter 10, Steven Wong (Ed), Kluwer Academic Publishers, 1998, pp. 231-252.

## Technical Reports

1. A. Kouroubali, D.G. Katehakis, A. Berler, M. Tsiknakis. (2012). Electronic Health Records: An Implementation proposal for National Health Care organizations, Technical Report 431, (FORTH-ICS/TR-431), Heraklion, Crete, Greece, July 2012.
2. C.E. Chronaki, A. Kouroubali, L. Esterle, E. Orphanoudaki, T. Roumeliotaki, A. Stathopoulou, M. Tsiknakis, *eHealth Consumer Trends Survey in Greece: Results of the 1st phase*, Technical Report 365, (FORTH-ICS/TR-365), Heraklion, Crete, Greece, July 2006.
3. D.G. Katehakis, S.G. Sfakianakis, D. Anthoulakis, G. Kavlentakis, T.Z. Tzelepis, S.C. Orphanoudakis, M. Tsiknakis, *A Holistic Approach for the Delivery of the Integrated Electronic Health Record within a Regional Health Information Network*, Foundation for Research and Technology - Hellas, Institute of Computer Science, Technical Report 350 (FORTH-ICS/TR-350), Heraklion, Crete, Greece, February 2005.
4. D. Katehakis, G. Chalkiadakis, M. Tsiknakis, SC. Orphanoudakis, *A Distributed, Agent-Based Architecture for the Acquisition, Management, Archiving and Display of Real-Time Monitoring Data in the Intensive Care Unit*, Technical Report 261, (FORTH-ICS/TR-261), October 1999.

## Papers in Panel Sessions in International Conferences

1. P. Adlassnig, M. Akay, R. Atun, J.C. Healy, H. Hutten, N. Saranummi, M. Tsiknakis, D. Fotiadis, I. Gerothanasis D. Koutsouris, Round Table on "Information Technology in Biomedicine: Integration of Education and Research, Advances and Challenges", IEEE Information Technology and Applications in Biomedicine Conference, 26-28 Oct 2006, Ioannina, Greece. [[http://medlab.cs.uoi.gr/itab2006/doc/Pre-final Conference Program.doc](http://medlab.cs.uoi.gr/itab2006/doc/Pre-final%20Conference%20Program.doc)]
2. M. Tsiknakis, *Achieving interoperability of systems and eHealth services, in the context of a RHIN, through HL7 V 2.xx and CDA*, Panel on HL7 and Interoperability Issues in Healthcare Information Systems: Theory and Practice, 2nd ICICTH International Conference on Information & Communication Technologies in Health, Samos, Greece, July 2004.

3. M. Tsiknakis, *HYGEIAnet: Integrated Health Telematics Network of Crete, Panel on Regional Healthcare Networks*, International Conference on Medical Physics, Patras, September 1999.
4. M. Tsiknakis, *Employing Digital Library Technologies in Developing the Information Infrastructure of Regional Healthcare Networks*, European Conference on Digital Libraries 1998 (ECDL 98), Heraklion, Crete, Greece, 19 - 23 September, 1998.
5. M. Tsiknakis, *Health Telematics Services. Round table on 'Internet and Medicine'*, 24<sup>o</sup> National Medical Congress, Athens, 5-9 May 1998.

## Papers in National Conferences

1. C-M. Vazakopoulou, A. Pampouchidou, F. Yang, F. Meriaudeau, K. Marias, M. Tsiknakis. *Détection de la dépression par l'analyse de la géométrie faciale et apprentissage automatique*, Congrès National de la Recherche des IU "CNRIUT'2018", Aix-en-Provence, Jun.2018
2. M. Tsiknakis, *An unobtrusive intelligent multisensory mirror for well-being status self-assessment and visualization—The SEMEOTICONS project*, eHealth Forum 2016, 25-26 October, Athens.
3. P. Vorgia, G. Giannakakis, V. Sakkalis, M. Pediaditis, C. Farmaki, S. Voutoufianakis, M. Tsiknakis, *Ανίχνευση αφαιρέσεων με χρήση προσεγγιστικής εντροπίας. του 8ου Πανελληνίου Συνεδρίου Επιληψίας*, 2013.
4. A. Κουρούμπαλη, Δ. Γ. Κατεχάκης, Α. Μπέρλερ, Μ. Τσικνάκης, *Ηλεκτρονικός Φάκελος Υγείας: Πολυτέλεια ή Ανάγκη; 14ο Πανελλήνιο Συνέδριο Management Υπηρεσιών Υγείας*, Αθήνα, 12-13 Οκτωβρίου 2012.
5. M. Pediaditis, M. Tsiknakis, L. Vorgia, *Αυτόματη ανάλυση Βίντεο κλινικής εικόνας σε κρίσεις αφάιρεσης*, 7ου Πανελληνίου Συνεδρίου Επιληψίας, Αθήνα, 30 Μαρτίου - 1 Απριλίου 2012.
6. CE Chronaki, M. Tsiknakis, et al, *Use of internet for health related issues: prospects for ehealth services in Greece*, 13<sup>th</sup> Pancretan Medical Conference, Heraklion, 9-12 November, 2006.
7. G. Potamias, M. Tsiknakis, V. Papoutsidis, A. Kanterakis, K. Marias, D. Kafetzopoulos, *Advancing Clinico-Genomic Research Trials via Integrated Knowledge Discovery Operations*, In G. Antoniou, G. Potamias, C. Spyropoulos, D. Plexousakis (Eds.): *Advances in Artificial Intelligence*, 4th Hellenic Conference on AI, SETN 2006, Heraklion, Crete, Greece, May 18-20, 2006, Proceedings. LNCS 3955 Springer 2006, ISBN 3-540-34117-X)
8. F. Chiarugi, P.J. Lees, D. Lombardi, C.E. Chronaki, M. Tsiknakis and S.C. Orphanoudakis, *Integration of digital ECGs with clinical information systems: supporting the automation of clinical processes*, Annual Conference of the Greek Cardiologic Society, Athens, 2001.
9. M. Tsiknakis, *HYGEIAnet: Integrated Regional Health Telematics Networks of Crete, Architecture, technological challenges and achievements*. In proceedings of INFOSYSTEM, Thessaloniki, Sept 2000.
10. M. Tsiknakis, *Virtual Integrated Health Record – Technological Challenges and achievements*, 23rd Hellenic Medical Congress, Athens, May 1999.
11. M. Tsiknakis, *Integrated Regional Healthcare Network of Crete - Technological challenges and current achievements*, 3rd Pancretan Symposium of General Medicine, Rethymnon, Greece, October 1998.

## Invited Presentations and Colloquia

1. M. Tsiknakis, *Precision Medicine, big data, AI and beyond σε συμπαιγείς όγκους*, 7ου Πανελληνίου Συνεδρίου Ερευνητικής Εταιρείας Ουρογεννητικής Ογκολογίας, 20-22 September 2019, Thessaloniki.

2. M. Tsiknakis, 25ο Ελληνικό Συνέδριο Κλινικής Ογκολογίας, *Integrative data analysis for implementing precision medicine*, Round table: Precision oncology: from concept to realization, Chairs: D. Mavroudis, A. Koutras, K. Stamatopoulos, 18-20 April 2019, Athens.
3. M. Tsiknakis, *Big Data Analytics: Promise and Potential for eHealth and Biomedicine*, eHealth Forum 2016, 25-26 October 2016, Athens.
4. D. Katehakis, M. Tsiknakis, A. Kouroumbali, *EHR system certification, Round Table on Certification of EHR*, Chair: A. Berler, 38ο National Medical Congress – May 2012, Athens.
5. G. Potamias, M. Tsiknakis, D. Kafetzopoulos. *Clinico-Genomics and Biomedical Informatics: The ACGT Approach*, International Symposium on Biomedical Informatics in Europe, 26-27 June 2007, Barcelona, Spain (invited; Abstract & Presentation).  
<http://www.infobiomed.net/symposium/programme/topicF.htm>
6. M. Tsiknakis, G. Potamias, D. Kafetzopoulos. *Protein Profiling and Diagnosis with lab-on-chip and proteomics technology: the Loccandia integrated clinic-proteomics environment*, International Symposium on Biomedical Informatics in Europe, 26-27 June 2007, Barcelona, Spain (invited; Abstract & Presentation).  
<http://www.infobiomed.net/symposium/programme/topicF.htm>
7. M. Tsiknakis, *The ACGT project and its suite of semantic technologies in support of post-genomic clinical trials*, Healthgrid Conference 2009, Monday, 29th of June 2009, Berlin, Germany.
8. M. Tsiknakis, *Communities of Practice in the domain of Health and Social Care: Novel ethical, legal and security challenges*, FIDIS Doctoral Consortium scientific meeting on “Identity of the mind, body and spirit”, 17-20 June 2008, Heraklion, Crece.
9. M. Tsiknakis, *The PICNIC-project – regional health economy operationalized*, WHO Regions for Health Network Annual Conference "Health and Wealth, Regional Perspectives", 26-27 November 2007, Düsseldorf, Germany.
10. M. Tsiknakis, *Regional Innovation in the Health Sector: The HYGEIAnet Experience*, Capture Study visit and conference, Science and Technology Park of Crete, 29 March 2007, Heraklion.
11. M. Tsiknakis, *From Proposal Writing to Project implementation: The ACGT (Advancing Clinico-Genomic Trials) project*, ETI-INCUBATE seminar, 19-20 Oct 2006, Heraklion, Greece.
12. M. Tsiknakis, *Privacy, Security and Trust: Experiences with federated identity Management in the HYGEIAnet Regional Health Information Network (RHIN)*. Experts' Workshop on Health-ID Management in Europe, 20-21 March 2006, Amsterdam, NL.
13. M. Tsiknakis, *Open Grid Services for improving medical knowledge discovery on Cancer: The ACGT integrated project*, Workshop on Clinical Decision Support Systems, Scientific and Technological Park of Epirus, Ioannina – 17 March 2006.
14. M. Tsiknakis, *Electronic Health Record: International developments and future trends*, Scientific Meeting on Medical Informatics, University Hospital 'Agia Olga', Athens, May 2002.
15. M. Tsiknakis, *Strategy for the Development of Integrated Regional Health Telematics Networks: Architecture and Enabling Services of the Healthcare Information Infrastructure (HII)*, 2nd Scientific Meeting of Tzanio Hospital, in cooperation with the Johns Hopkin Hospital (Baltimore, USA), Piraeus, May 26, 2001.
16. M. Tsiknakis, Ολοκληρωμένες Υπηρεσίες Τηλεματικής στην Υγεία, 24ο Πανελλήνιο Συνέδριο Χειρουργικής Παιδών (24th Panhellenic Congress of Paediatric Surgeons), 28 Σεπτέμβρη 2001, Καβούρι, Ελλάδα
17. M. Tsiknakis, *Virtual Integrated Health Record – Technological Challenges and achievements*, 23rd Hellenic Medical Congress, Athens, May 1999.
18. M. Tsiknakis, *Technological challenges for the development of HYGEIAnet*, Integrated Telemedicine in the 21st Century: Opportunities for Citizens, Society and Industry, International Workshop, Strasbourg, France, November 1999.

19. M. Tsiknakis, *The HECTOR Platform: a future European reference architecture*, Health Emergency Telematics Conference, Paris, June 1999.
20. M. Tsiknakis, *A strategy for the development of Integrated Regional Health Telematics Networks*, 1st RISE Conference: Strategy for the development of Information Society in the Region of Epirus, Metsovo, Greece, June 1998.
21. M. Tsiknakis, *Integrated Regional Healthcare Network of Crete - Technological challenges and current achievements*, 3rd Cretan Symposium of General Medicine, Rethymnon, Greece, October 1998.
22. M. Tsiknakis, *Intelligent and Secure Management and Communication of Medical Images*, Symposium on Medical Imaging, School of Medicine, University of Crete, Heraklion, Crete, Greece, May 1994.
23. M. Tsiknakis, *Intelligent Computers in Measurement and Instrumentation*, SERC Symposium on Instrumentation and Analytical Science, September 1989, UMIST, Manchester, UK

### Editorials and Articles in ERCIM News (full paper reviewed)

1. A Hoppe, M Tsiknakis, ACGT – Evolution of a Semantic Grid Infrastructure, ERCIM News 80, pp.7-8, January 2010.
2. M. Tsiknakis, Advancing Clinico-Genomic Clinical Trials on Cancer: Open Grid Services for improving Medical Knowledge Discovery, ERCIM News, Special issue on Service Oriented Computing, no 70, pp.30-31, July 2007.
3. S.C. Orphanoudakis, D. Kafetzopoulos, M. Tsiknakis, Biomedical Informatics in Support of Individualized Medicine, ERCIM News, Special Issue on Biomedical Informatics, no. 60, pp. 54-55, 2005.
4. M. Tsiknakis, D. Kafetzopoulos, ERCIM Working Group on Biomedical Informatics, ERCIM News, Special Issue on Biomedical Informatics, no. 60, pp. 54-55, 2005
5. T. Margaritis, K. Marias, M. Tsiknakis and D. Kafetzopoulos, Biomedical Imaging for Enhanced Genetic Data Analysis, ERCIM News, Special Issue on Biomedical Informatics, no. 60, pp. 54-55, 2005.
6. C. Chronaki, X. Zabulis, M. Tsiknakis, and S.C. Orphanoudakis, Web-Based Medical Services in the Regional Health Care Network of Crete, ERCIM News, no. 29, pp. 28-29, 1997.

### Citations

The published research work of Dr Tsiknakis has received significant international recognition. A relevant search in Scholar ([https://scholar.google.gr/citations?user=Khj\\_WYgAAAAJ&hl=el](https://scholar.google.gr/citations?user=Khj_WYgAAAAJ&hl=el)) results in 3634 citations (h-index : 33) of his published work.

### Other Miscellaneous Publications

Dr Tsiknakis, when at FORTH, has published extensively on issues related to medical and biomedical informatics and eHealth on numerous non-scientific journals as well as in the national and regional press.

Indicative such articles can be found at [http://www.ics.forth.gr/bmi/ehealth\\_in\\_the\\_news.html](http://www.ics.forth.gr/bmi/ehealth_in_the_news.html).